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COMMUNICATIONS.

THE PATHOLOGY OF BRONCHO-PNEUMONIA.*

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I shall offer for your consideration, this evening, some observations on the subject of broncho-pneumonia. I venture to do this, for the reason that I believe that this particular lesion suffers from the effects of tradition, from having been called catarrhal pneumonia, and from its relations to pulmonary phthisis. It is also doubtful whether the profession appreciate what a common lesion it is.

I do not mean that the real lesions and symptoms of the disease have not been described. They have been described by different observers; but their descriptions have been, for the most part, fragmentary, and have failed to give a picture of the disease.

The current notions concerning the disease have remained somewhat obscure and indefinite. The prevailing ideas concerning broncho-pneumonia may be stated as follows:

That the terms broncho-pneumonia, lobular pneumonia, catarrhal pneumonia, and capillary bronchitis may all be used to designate the same lesion—although it is customary to use the words broncho-pneumonia and lobular pneumonia when the disease occurs in children; capillary bronchitis when it occurs in adults; and catarrhal pneumonia when it is believed to be a form of phthisis.

That the inflammation begins in the bronchi, extends to the small and capillary tubes, and then to the groups of air vesicles which belong to these bronchi, and that for this reason the hepatization assumes a lobular form.

That obstruction of the bronchi with inflammatory products frequently produces areas of atelectasis.

That the catarrh may become chronic, the products of inflammation in the air-vesicles undergo cheesy degeneration, interstitial changes be developed in the framework of the lung and so a form of pulmonary phthisis be produced.

This, I think, is a fair enough example of the ordinary accounts of broncho-pneumonia—accounts which fail to bring out the essential features of the disease.

Let us, then, turn to the conditions themselves—to the clinical symptoms and the lesions of broncho-pneumonia as we all can see them for ourselves.

To approach the subject properly, we must consider the symptoms and lesions of acute bronchitis, as well as those of broncho-pneumonia.

First, then, of *acute catarrhal bronchitis.* This is a disease of very common occurrence, especially in children, but one which seldom proves fatal. Our knowledge of its lesions is derived from exceptionally severe cases, from cases which are complicated by other diseases, and from the symptoms which we observe during life.

The inflammation involves regularly the trachea and the larger bronchi, less frequently the smaller

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bronchi also. As a rule, the bronchi in both lungs are equally affected.

The first change seems to consist in a congestion and swelling of the mucous membrane of the bronchi with an arrest of the functions of their mucous glands. This is attended with pain over the chest, a feeling of oppression, rapid or asthmatic breathing, and a dry cough.

Fever and prostration are present in a degree corresponding to the extent and severity of the inflammation and to the age of the patient.

After this the mucous glands resume their functions with increased activity, the congestion and swelling diminish, there is a more rapid desquamation of the superficial epithelial cells, an increased growth of the deeper epithelial cells, and a moderate emigration of white blood-cells, Sometimes the red blood-cells also escape from the vessels.

The patient now has less pain and oppression, the cough is accompanied with an expectoration of mucus, mixed with epithelium, pus, and sometimes blood. After death the only lesions visible are the increased quantity of mucus, the growth of new epithelium, a few pus-cells infiltrating the stroma of the mucous membrane, and sometimes a general congestion. If the smaller bronchi are involved, they contain pus-cells.

In a moderate number of cases, especially in very young children, certain accessory lesions are added. There may be a general congestion of the parenchyma of the lung, and even a filling of some of the air-vesicles with inflammatory products. Still further, the filling of the small bronchi may lead to the collapse of the groups of air-vesicles to which they lead, and thus are produced areas of atelectasis, which may be further changed by inflammatory processes.

In acute catarrhal bronchitis, then, the inflammation involves regularly only the mucous membrane of the bronchi; and in this mucous membrane the only changes are: congestion, swelling, changes in the epithelial cells, and in the functions of the mucous glands.

As complicating conditions, we may find atelectasis, congestion of the parenchyma, and areas of diffuse pneumonia.

Now let us consider the lesions and symptoms of broncho-pneumonia.

This disease is of common occurrence in children as an idiopathic inflammation, and as a complication of measles, whooping-cough, scarlet fever, and diphtheria. In adults it occurs less frequently, but in them also it may be idiopathic, may complicate the infectious diseases, and may follow injuries of the brain and spinal cord. Constitutional syphilis also may give rise to broncho-pneumonia, and in pulmonary phthisis this same inflammation constitutes an important part of the lesions.

In children, while the inflammation always presents the same essential characters, yet there is considerable diversity, both in the symptoms and in the lesions, in different cases. Thus, in infants a few weeks old, often the only symptoms are rapid breathing, a febrile movement, prostration, and death.

In older children there are well-marked constitutional disturbances—fever, prostration, and cerebral symptoms; in some cases the cerebral symptoms being excessively developed. The breathing is rapid. There may be cough. The physical signs are those of bronchitis alone, or of bronchitis with consolidation of the lung. If there is consolidation, it is developed slowly, and disappears slowly. Not infrequently, successive portions of the lung become consolidated. The disease terminates in the death of the patient, in recovery, or it assumes a chronic character. This disposition of the broncho-pneumonia to become chronic is one of its characteristic features, a feature in which it difiers from acute bronchitis and lobar pneumonia. The cases vary, however, as to the degree in which the disposition is carried out.

In some children the disease after running its regular course of one or two weeks subsides, the constitutional symptoms are less marked, the child seems better in every way. But yet the physical signs of consolidation continue, there is still a slight rise of temperature and convalescence does not fairly begin. In this condition the child may remain for a number of weeks and then get entirely well, except that the percussion-note and the breathing remain somewhat changed.

In many such cases as these the recovery is permanent and the child has no further trouble. But in other cases, after the lapse of several months, the child is attacked with acute general tuberculosis. Thus it is not uncommon in children's asylums for an epidemic of measles complicated with broncho-pneumonia to be followed after the lapse of a year by an epidemic of acute tuberculosis.

In other children the course of the disease is more protracted. The physical signs of consolidation continue, there is a febrile movement, the child has no appetite, it gradually emaciates and dies at the end of several months. These cases resemble pulmonary phthisis in their symptoms,

but they are really only examples of a broncho-pneumonia which has become chronic.

In still other children the physical signs and the constitutional disturbances continue, but the child does not succumb to the disease. It continues to live with the evidences of a chronic bronchitis which go on year after year. So the child may grow up to adult life, sometimes better, sometimes worse, never entirely well. Cough, expectoration, dyspnœa, occasional fever harass the patient at intervals. The lung becomes more and more solid, the bronchi more dilated, the pleura thicker, and the affected side of the chest more retracted.

In the cases of acute broncho-pneumonia which die within from two days to three weeks, there is some variety in *the post-mortem appearances.*

The lungs may be large and well aërated, but on section the cut ends of the medium-sized and smaller bronchi are unusually prominent and thick, and around them are little zones of hepatization of red, or gray, or white color. This appearance of the lung may be further modified by a cylindrical dilatation of the thickened bronchi.

In other cases the lungs are denser and more congested, and a larger or smaller portion of them is consolidated. The consolidated portions are unaërated, dense, and smooth, of red color, or pinkish gray, or dark red. Or the color may be mottled—small, rounded gray or whitish areas surrounded by red hepatization.

The distribution and extent of the consolidation also varies. The hepatized areas may be small, encircle the bronchi, and situated at some distance from each other. Or they may in some one lobe or part of a lobe be close together, and between them is a more diffuse hepatization so that this part of the lung may be completely solid.

The appearance of the consolidated lung may be further changed by a cylindrical dilatation of the bronchi.

In still other cases the consolidated portions of lung are of some size and of somewhat regular shape as if they were portions of lung corresponding to bronchi. These portions are dense, unaërated, of a dark red color, and somewhat shrunken.

If the inflammation has become chronic, then over one lobe or part of a lobe the pleura is thickened, bands of fibrous tissue run into the substance of the lung, and the lung tissue is dense, hard, and unaërated.

When we examine these lungs more minutely we notice first some peculiarities which belong to them because they are the lungs of children and not of adults. The bronchi and the connective tissue frame-work of the lungs occupy a larger relative space than they do in the lungs of adults; and in any inflammation of the lungs they are apt to take a more prominent share. The air vesicles are small and products of inflammation which have been formed within them are absorbed slowly and with difficulty. The walls of the vesicles are lined with a nearly continuous layer of epithelial cells. When the vesicles are inflamed there is a greater production of new epithelium and a less of fibrin than in adult lungs. The small size of the air vesicles render a simple congestion and dilatation of the capillary vessels within their walls a more serious condition than it is in adults. The bronchial glands are more regularly and intensely inflamed. These peculiarities of the child's lung seem to account for its liability to certain forms of inflammation.

The same exciting causes, apparently produce in a child under five years of age, broncho-pneumonia; in a person between the age of five and fifteen, broncho-pneumonia, or lobar pneumonia; in an adult, lobar pneumonia.

Now let us consider more in detail the lesions of broncho-pneumonia in children.

The trachea and large bronchi are congested and coated with mucus as in acute bronchitis; but in the smaller, and to a less extent in the capillary bronchi, the changes are of a different character. In these small bronchi, the entire thickness of their walls is infiltrated with cells—partly new connective tissue cells, partly pus cells. This change may affect the small bronchi equally in all parts of the lungs, or it may be confined to those situated in one lobe or part of a lobe. Around every bronchus, of which the walls are infiltrated with cells in this way, is a zone, either of intense congestion or of pneumonia, the inflammation extending directly outwards from the bronchus to the surrounding vesicles.

In the zones of peri-bronchitic pneumonia, the walls of the air vesicles are infiltrated with cells in the same way as are those of the bronchi. The cavities of the vesicles are filled with pus and epithelium, or with an organized tissue composed of a basement substance and cells.

These constitute the essential features of the lesion—a bronchitis which involves the *walls* of the bronchi, and a pneumonia which involves the vesicles *surrounding* the bronchi, and which produces changes in the *walls* of the vesicles as well as in their cavities, while the inflammatory products within the cavities of the vesicles are not only pus and fibrin, but also organized tissue.

To these essential lesions are often added other accessory changes. The bronchi, of which the walls are infiltrated with cells, may be dilated. Between the zones of peri-bronchitic pneumonia the lung is congested, and there may be areas of diffuse red hepatization, which do not, however, correspond to bronchi. There is often a layer of fibrin on the pulmonary pleura. There may be areas of atelectasis corresponding to obstructed bronchi.

The bronchial glands are swollen, and the seat either of simple or of tubercular inflammation.

When the broncho-pneumonia passes into the chronic condition, the inflammation usually persists only in part of a lobe, or a single lobe, while the rest of the lung returns to a normal condition. In that portion of the lung in which the inflammation persists, we find the small bronchi with their thickened walls and their zones of peri-bronchitic pneumonia. The number of bronchi involved may be moderate, and then a section of the lung will look as if it were studded with fibrous nodules. Or most of the bronchi may be involved, the zones of peri-bronchitic pneumonia are close together, and the entire lung tissue is dense and solid. In either case the bronchi may be dilated and the pulmonary pleura thickened. As the inflammation goes on, its interstitial character becomes more and more marked, until the affected portion of lung becomes converted into a mass of fibrous tissue, in which the bronchi still remain, while the air vesicles are obliterated. The blood-vessels, however, are, for the most part, not obliterated, so that the lung does not become necrotic or degenerated. Still occasionally areas of cheesy degeneration exist.

These are the characteristic features, then, of the broncho-pneumonia of children.

In adults broncho-pneumonia occurs in one of four forms: As an idiopathic inflammation of acute and severe type. As a subacute inflammation. As a complication of the infectious diseases, and of lesions of the brain and spinal cord. As one of the lesions of phthisis.

1. The acute, idiopathic broncho-pneumonia of adults.

The invasion of this disease is acute and severe. The patients have rigors; pains in the head, back, and chest; vomiting and marked prostration. The temperature runs between 102 and 105; the pulse is rapid; the breathing is rapid and unsatisfactory. There is cough, at first dry, later accompanied by profuse muco-purulent and bloody expectoration. There is venous congestion of the skin, albumen in the urine, and cerebral symptoms. When we examine the chest we find the percussion note normal, or exaggerated, or dull. There are crepitant, sub-crepitant, and coarse râles with sibilant and sonorous breathing.

The cases usually terminate fatally in about seven days. After death we find both lungs large, heavy, and congested. There is fibrin on the pulmonary pleura. The trachea and large bronchi are congested and coated with mucus. The smaller bronchi contain pus, their walls are thickened and infiltrated with cells, and around them are zones of air vesicles with their blood-vessels gorged with blood, and in their cavities epithelium, pus, and fibrin.

2. *The subacute broncho-pneumonia of adults.*—This is a rare disease. It has a clinical history much resembling that of acute of phthisis.

The patients are attacked with prostration, fever, cough, and muco-purulent expectoration, dyspnœa, pain in the chest, coarse râles all over the chest, with dullness over the consolidated portion of the lung. These symptoms continue, the patients lose flesh and strength, and die at the end of several weeks.

After death we find fibrin on the pulmonary pleura. The larger bronchi are congested and coated with mucus. There is an irregular, diffuse red hepatization mottled with small white nodules from the size of a pin's head to that of a pea. In the diffuse red hepatization the air vesicles are filled with pus, epithelium, and fibrin. The white nodules correspond to sections of bronchi with zones of peri-bronchitic pneumonia. These bronchi are of small size, they contain pus, their walls are thickened and infiltrated with cells, and they may be dilated.

In the peri-bronchitic zones of pneumonia the walls of the vessels are thickened and infiltrated with cells, but the blood-vessels remain pervious and can be injected. The cavities of the vesicles are filled not with pus and fibrin alone, but also with a basement substance of homogeneous or finely fibrillated character, in which are imbedded polygonal, round, and fusiform cells.

3. *The complicating broncho-pneumonia of adults.* It is not uncommon for some of the infectious diseases, and some of the lesions of the brain and spinal cord to be accompanied by the development of this form of inflammation of the lung.

In typhoid fever we sometimes find a broncho-pneumonia exactly resembling the same lesion as it ordinarily occurs in children.

In pyæmia the inflammation is of the same kind, but is apt to be less extensive, involving only part of one or both lungs.

With lesions of the brain and spinal cord the changes are the same as with pyæmia.

4. *With phthisis*, both acute and chronic, broncho-pneumonia often forms an important part of the morbid changes in the lungs, but yet it is never the primary or the only lesion. It is only one of a number of pathological changes which go to make up the complex whole of pulmonary phthisis.

From what has been said, then, I would draw the following conclusions:

There is a form of inflammation of the lung which may properly be called broncho-pneumonia.

In children it is the most frequent form of pneumonia; in adults it is less common.

It differs from bronchitis and from lobar pneumonia in that the inflammation effects changes in the *walls* of the bronchi and of the air vesicles, and this peculiar interstitial character of the process exists from the very outset.

The inflammation extends from the bronchi, not to the group of air vesicles into which they lead, but directly outwards to the vesicles which surround the inflamed bronchi, and in these vesicles the walls are changed.

The interstitial character of the inflammation is its most important feature. It accounts for the severity of the symptoms, the frequent long continuance of the consolidation, the dilatation of the bronchi, and for the tendency of the broncho-pneumonia to assume a chronic character.

The complicating tubercular inflammation of the bronchial glands may give rise later to general tuberculosis.

Broncho-pneumonia is not a form of phthisis; it is doubtful if it is ever directly followed by phthisis; but it constitutes a part, and often an important one, of the lesions which constitute phthisis.

I have endeavored to describe in a somewhat incomplete way the characteristic symptoms and lesions of an ordinary disease. I am well aware that I have described conditions which are familiar, and that nothing which I have said has not often been said before.

But the very common occurrence of this form of inflammation of the lung renders it all the more important. The varying character of the lesions has confused their essential and their accidental characters, and I think it is worthy of consideration whether the views which I have advanced concerning the pathology of the disease, are not the true ones, namely, that the inflammation is essentially and from the outset an interstitial one, more or less complicated by other conditions.

ACCIDENTAL CURE OF STRICTURE OF THE ŒSOPHAGUS.

BY T. CURTIS SMITH, M. D.

Of Aurora, Ind.

John R. when twenty-two months old drank a little of a strong solution of concentrated lye. The mother had the good sense to cause the child to swallow, at once, considerable oil, and followed this by the use of milk. The mouth, fauces and œsophagus were badly seared by the strong solution of lye as it passed over them. It was soon discovered that the child had stricture of the tube and that it was probably down near the stomach. He was naturally a very hardy, robust boy, a twin, the two boys being about equal in size weight and figure—as bright and strong a brace of boys as one will meet in a day's ride.

After the stricture developed the child was compelled to live on fluid diet, or very thin semi-liquid foods, and must needs take this in small quantities at a time and slowly. This was not always an easy matter to control, for his vigorous body and otherwise sound health was also accompanied by a demanding appetite, and frequently by an imperious will. Often some solid food would find its way down his throat, only to be regurgitated after being retained a short time.

Still, for two years the child continued to be fairly well nourished, living largely on milk, meat gravy, soft eggs, bread-soup, etc. It was also noticed that at long intervals there would seem to be a time when the child could retain a few mouthfuls of solid food. But this lasted for only a very brief spell.

After about two years of this condition of his œsophagus, he was, by a visitor, one day, given a piece of dried peach. Of course he ate it. It was not regurgitated. Soon it became apparent that even milk or water did not find its way to the stomach. When swallowed it was immediately regurgitated. The thirst soon became intense and the child wanted to drink almost constantly, yet as constantly the fluid was returned. The degree of agony was certainly intense, and was telling rapidly on the child's strength. I was sent for. Anodynes and anti-spasmodics were given in doses of a few drops at a time, and soon controlled the most of the pain, so that the child slept some. That was late on Sunday afternoon.

On Monday morning the treatment was continued, and a little nourishment added, in very

small quantities frequently given, and an attempt was made to use a tonic and stimulant in the same way, but this failed. The remedies were then used per rectum, and also some light fluid foods were thus given.

On Tuesday the case seemed desperate, the prostration extreme, and it was evident the case would terminate fatally, unless better sustained or soon relieved. He was now given enemas of bisulphate of quinine in tonic doses in concentrated beef tea made of "Johnson's peptonized fluid beef." Anodynes were also added in the same solution. This he retained, and with this he was sustained and the pain controlled. His condition was at once so much improved that it was very noticeable. He was thus supported until the piece of dried peach became, as I suppose, softened, disintegrated, and passed on through the constriction in the œsophagus. This seemed to occur on the fifth day. At once there was a demand for food and drink; and from that date to the present time the child has been able to eat anything it has desired, without the least trouble as to its reaching the stomach or being regurgitated.

It seems clear that the piece of dried peach must have lodged in the constriction of the œsophagus that had been caused by swallowing the concentrated lye, and when the fluids came in contact with it, of course it swelled and expanded the narrowed opening to a sufficient extent to allow it to pass through, and so has permanently overcome the constriction. The ultimate termination of the accident proved to be a great boon for the child, but it brought it very near to a fatal issue before the favorable result was attained. I do not believe it could have successfully endured until the obstruction was removed if it had not been sustained by the fluid beef, given, as it was, by injection.

It might be pertinently asked: "Why not use a bougie to push the obstruction out of the way?" It is not an easy matter to use such an instrument on a child of this age, the tissues are delicate, and force sufficient to remove the peach might have been enough to tear the œsophagus across, or to slit it and allow the bougie to pass into tissues outside of the proper channel. Especially was this true before the dried peach became softened. The slow steady expansion of the peach constituted a splendid dilator and has made its work permanent. It is now eighteen months since the peach was swallowed. In a similar case I would advise that the syringe be at once resorted to and that food, drink and remedies be thus administered from the very outset of the case. In this way there would be far less danger of loss of life from the pain, thirst and exhaustion resulting from want of food supply.

I have met with a number of cases where children have had constriction of the œsophagus caused by swallowing concentrated lye. In one case some ten years or more ago, there seemed for a time to be a good recovery, but later the child died of inanition in connection with a very slight attack of fever.

The subject of this paper has made the best and most permanent recovery of any one of this kind coming under my observation, and even this may have a relapse of the trouble, but I think not. In a case, dangerously constricted, would we be justified in attempting relief by this method? When the constriction is not relieved, it seems to become more complete as its age advances, and finally brings about inanition. This has been my experience, at least, in every case, except the one related in this paper.

TREATMENT OF TYPHOID FEVER.

BY R. W. HUTCHINS, M. D.,
Of New York.

No disease requires a greater amount of experience in its treatment than typhoid fever. It is not only what to do, but what not to do, that causes the difficulty to the young practitioner. It is a safe rule to avoid, as far as possible, all perturbating remedies. Typhoid fever is a self-limiting disease, and there is no known specific for it. Many cases if let alone would run their course favorably, without any medication whatever. An experienced nurse is almost absolutely necessary. The diet should be regulated, the bed-room well-ventilated, and the temperature of the room in winter not allowed to rise above 65° F. Milk, to which pepsin or lime-water is added, should form the basis of the diet; prepared barley is a useful adjunct.

Sponging the body with tepid water keeps the temperature down, and is generally agreeable to the patient. The cold bath system of treatment is impracticable in private practice. When there is insomnia or much restlessness, grs. xv. to xx. of chloral will generally produce refreshing sleep. The indiscriminate use of stimulants is uncalled for. Many cases get along much better without them; others require a pretty liberal supply to tide over dangers. The diarrhœa should not be interfered with unless excessive—in that case opium is the best remedy. Tympanites is best

relieved by small doses of turpentine, and the application of tepid compresses to the abdomen. The best remedy for the peritonitis, hemorrhage or perforation that sometimes complicates the disease, is opium. Pulmonary complications should be met by counter-irritation and dry cupping. Salicylate of soda has a very marked effect in lowering the temperature of the body, but seems to have a bad influence on the brain and bowels, increasing the hyperæmia of the former, and often producing hemorrhage from the latter. Quinine also has a decided antipyretic effect, but I consider it a dangerous remedy, especially as prescribed by some of the "hobby" doctors. Salicin produces many of the good results of these two remedies, and is unattended by any of their ill effects. It has been uniformly successful in my hands, all the cases in which I have used it having recovered. It has a beneficial effect on the bowel trouble, and it is there where the chief danger lies. I prescribe it in grs. x-xx. every two or three hours.

Hospital Reports.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY HORATIO C. WOOD, M. D., L.L. D.,

Professor of Diseases of the Nervous System.

Reported by WILLIAM H. MORRISON, M. D.

Simulated Pulmonary Symptoms.

GENTLEMEN: I wish to-day to call your attention to a case which is a somewhat perplexing one, and one which calls for a good deal of thought. It seems to me chiefly interesting as showing how we are forced to our conclusions by a process of exclusion. The history is peculiar, and I shall relate it before the man is brought into the room.

He is a Russian Jew, who about two or three years ago fled from Keith at the time of the frightful persecutions to which the Russian Hebrews were subjected at the hands of the populace. He came to this country, and applied to one of the prominent drug firms of this city, stating that he had been engaged as an apothecary. He was employed and put to work at some of the finer branches of the trade, but being found incapable, was transferred to another department, and finally was put in charge of the washing of the bottles. He is said to have been, under these circumstances, an industrious, steady sort of a man showing a creditable affection for his family, frequently sending money home to his mother.

In May, seven months ago, he began to have a very peculiar character of breathing, and complained of general weakness, languor, and inability to attend to his work. This peculiarity of breathing continued, until the unrythmical character of the breathing became excessive. The man declared that he was unable to work. His employers then sent him to a physician to be examined. It was stated that he had emphysema. He was then examined by a second physician, who stated that the man had myelitis, and that the myelitis had produced the emphysema. The man was then sent to me. I shall now have him brought in.

As the man sits before you he seems to be well-nourished, and shows no signs of disease, except this peculiar breathing, which now occurs at intervals which are sometimes shorter and sometimes longer. He says that he has pains all over, but at present they are most marked in the shoulders. For the past couple of weeks he has had some headache. As he walks, his gait exhibits no peculiarity; and as he can walk a long distance, there is evidently no failure of power in the legs. The patellar reflex is present on both sides. The dynamometer shows that on both sides he has a good grasp. There is no apparent failure of power in the arms. I shall try another reflex. I do not know how many of you are aware of the fact, that if you pinch the back of the neck of an ordinary individual, dilatation of the pupil will be produced. This affords a good test for discovering any derangement of the apparatus which is connected with the movements of the pupil. I cannot to-day occupy time with an elaborate discussion of the physiology of the pupil, but recent researches in disease have made the study of its action very important. In some cases of locomotor ataxia, for instance, the diagnosis is made with more certainty from the pupil than by almost any other means. On applying this test, the movements seem to be entirely perfect.

It is plain to my mind, in the first place, that the man has not myelitis. He has no disturbance of sensation except certain asserted pains, no loss of power in the arms or legs, impairment or exaggeration of the reflex movements, no evidence of interference with coördination; in other words, with the exception of certain asserted pains, there is no symptom of spinal disturbance. The peculiar breathing with which this man is affected could not arise from myelitis. It might, possibly, arise from some disorder, in the neighborhood of the origin of the pneumo-gastric or phrenic nerve.

In the next place, looking for signs of emphysema, we find no dilatation of the chest; and in the history of the case, no cause can be found for the existence of emphysema. You know that emphysema is almost invairably a secondary disorder, that it is a rupture of the air-vesicles due to some disorder of respiration. If we find a corpse with acute emphysema, death has almost certainly been caused by strangulation. If a man has emphysema, which has developed gradually, we find that he has suffered from asthma, chronic bronchitis, the pressure of a tumor upon the trachea, or some other interference with respiration. There is no history of any such cause. Therefore, in view of the fact that the chest does not present the barrel-shape of emphysema, and that there is no history of the causes of this condition, we proceed to the physical examination, with a very strong belief that emphysema does not exist. On percussion, the chest is resonant, but not excessively so. Auscultation reveals no

râles, but a perfectly normal breezy murmur. There is no dry crackling, as it is called, which, when present, is characteristic of emphysema. There is no distinct shortness of breath upon going upstairs, or at other times—only this perverted rhythm. The man goes up and down stairs fairly well.

Examining the heart, I find no murmurs and no lesion whatsoever. I have examined the large arteries for evidences of aneurisms pressing on the phrenic or pneumogastric nerve, but I can find no indication of such a conditiou.

I may say that there is no abdominal tenderness. There is no enlargement of the spleen. The area of percussion dullness over the liver, is not increased. In order to still further probe into the matter, we have examined the blood; but in the absence of splenic or grandular enlargement, there was no probability that the man was suffering from leucocythæmia, pseudo-leucæmia, or pernicious anæmia. The microscope showed no increase in the number of the white corpuscles, and no decrease in the number of the red.

Then we have studied the renal secretion. I am quite certain that chronic contracted kidney may exist with perfectly normal urine; and therefore the habit which many have formed of relying on a single examination of the urine is not a safe one. This man passes urine in normal quantity, its specific gravity is normal, it does not contain albumen or sugar. As this examination has been repeatedly made with the same result, we must conclude that he is not suffering from kidney disease.

The patient was now removed.

In this case, the kidneys and abdominal organs, the heart and lungs, have also been examined with the same result. There are no distinct indications of the presence of any nerve disease, unless it is a very localized medullary affection. You, perhaps, noticed in the man's answers to questions, the peculiar generality, so to speak, of his symptoms. He has a little of everything. He has trouble in his stomach, a morning call, pains which are everywhere. They are not localized, never associated with soreness, or pain on movement. He has this peculiar breathing. He eats heartily and sleeps well. The very aspect of the case suggests that the disease is not real.

Finding that he had so many symptoms, and that careful examination revealed nothing, I have had the man watched. It has been found that when by himself he had not this disorder of breathing, but when the doctor came into the ward, the altered breathing rapidly developed, and increased as it was talked about. He says today that he has headache. This has appeared since he was questioned about it. At first, he had no difficulty in going up and down stairs, but now he says that this increases the trouble. When the man is well fed, I find that he eats his meals with commendable avidity. There is present a little constipation, but there is no reason for suspecting severe constipation.

In the absence of any detectable sign of disease, in the presence of the fact that this man certainly does put on symptoms, that they grow worse as they are talked about, we come to the conclusion that his disease is rather mental than physical. I am not sure myself whether he is suffering from any distinct mental disorder which deserves to be called a disease. He certainly has sort of hysterical symptoms. He may be a masturbator, but we have never been able to detect him. You might call it a case of male hysteria of a mild type. A possible diagnosis might be that which the wife of one of my patients made. At one time I had under my care a man who, before the rebellion, had been a strong and vigorous man. He was with Sheridan in the war, and his nervous system was worn out. Ever after the war he was good for nothing, and was supported by his wife. One day he came to me with a newspaper in his hand and said, "This is what my wife says is the matter with me," and handed me the paper. It was the account of a man who had consulted an Indian doctress. The doctress told him that he was in a very bad condition, and there was little chance of anything being done for him. The diagnosis was "damned laziness struck in." I told the man that I thought his wife was two-thirds right. I think that such a diagnosis would be nearly right in the present case.

Medical Societies.

PROCEEDINGS OF THE KENTUCKY STATE SANITARY COUNCIL,

(*Concluded from page* 618.)

"Following butter, it is but proper to speak of milk, and without my mentioning the fact, you are all aware that the chief adulteration used for this is obtained from the well, spring, or branch. While water is the substance ever to be looked for in milk, it not unfrequently happens that finely-powdered chalk, or flour is added in order to bring up the specific gravity when an unusual amount of dilution has been found necessary in order to supply the demands of the milkman's usual run of customers. The adulterations of this substance should properly be classed as deleterious, as in every community there are members amongst the old and the young depending almost entirely upon this article of food to sustain life, and when weakened by water, or tampered with in any way, those using it must suffer. Though there may be no actual adulteration of the milk *per se*, it not seldom happens that the hygienic conditions surrounding cows are such as naturally to produce milk unfit for use.

"There is a very important class of substances used upon the table under the name of condiments, and when we come to examine the members of this group in detail, when powdered before they are sold, it not seldom happens that specimens of pepper, spice, cloves, mustard, etc., are found that have but little of the proper material present, being made up almost entirely of foreign matter. Mustard, as bought put in boxes, almost invariably contains either sulphate of lime, chromate of lead, flour, turmeric, or yellow lake, with the addition of red pepper to keep up the strength. Black pepper and the spices are largely made up of ground beans, sawdust, flour, linseed meal, and other materials of similar nature, in order to give bulk. So it is well never to

buy the ground article, but the material and grind it at home.

"When we come to speak of jellies, many are made from apple jelly or gelatine, and colored with aniline to the proper tint, the flavor being given by artificial essences.

"Then vinegar is not always what it seems to be, since sulphuric and muriatic acids are pressed into service to serve as such, the color coming from the addition of burnt sugar, and the odor being due to the addition of a little good apple-vinegar.

"Pickles are now and then made with the artificial vinegar I have just referred to, and at the same time a beautiful color is given to them by the addition of copper. And so I might continue for hours, taking up each article of food in detail, and show you that they are not always to be judged by appearances to be as they are named; but out of the small list we have hastily studied to-day, I think sufficient has been brought to your notice to impress you with the importance of the subject, and cause you to use great care in the selection of what is of such vital importance to good health.

"The buyer is to a considerable extent to blame for the practice of food adulteration, and when we recognize the fact that every commercial article is worth a living price to the seller, then we can demand a good article and enforce the demand by proper legislation. Housekeepers are in a position to deal with this question, and when they are aroused to calmly view the situation, a change for the better must follow.

"In conclusion, I will say that a cheap article in any line of goods is a dear one in time, and accordingly I can only advise you to buy your food articles from reliable dealers, and pay the market value for a good article."

Prof. J. N. Payne made a short talk on "How the Laws of Health Should be Taught in Our Schools."

Following this, Dr. E. Warfield, of Elizabethtown, read a paper on "Ventilation."

At the evening session, after the reading of a paper by the Secretary on "Disposal of the Dead," contributed by John D. Bengless, M. D., of Brooklyn, N. Y., Prof. L. Eddy, of Danville, read a paper on "Sanitation a Religious Duty," as follows:

"Remarks in some of the papers upon the exemption from cholera of the Jews at Marseilles and other places in France suggested this subject for this occasion. These Jews claim, and others claim for them, that their exemption is owing to their obedience to the Mosaic laws. Let us then inquire whether Moses was as a sanitarian in advance of the scientific French who have been so cholera-stricken, and of the solid English and the enterprising Americans who are now in such fear.

"That Moses was in advance may be inferred from the fact that while the merchant caravan from Egypt, India, and Persia passed through Palestine, and the Hebrews were thus exposed to the plagues of those countries, they were yet never visited by these plagues while they obeyed the Mosaic laws of purification; this being in accordance with the promise that if they obeyed, sickness and evil diseases would be taken away. Specified diseases from which freedom was promised were consumption, fever, inflammation, extreme burning, the botch of Egypt, scab, itch, bindness, and madness; and their crops should escape blasting and mildew, or fungoid growths. Some of these may have designated what we call cholera, yellow fever, and small-pox.

"Sanitation was a part of the Hebrew religious service, a preliminary requirement for good standing in the church, or for admission to church ordinances. To be ceremonially clean, frequent washing was necessary, and especially after any contact with filth or with any source of infection. This washing was for from one to seven days, and officials could add another week. Two classes of diseases, leprosy and issues, were excluded from the camp, and those whose purification required a week or more. Here was the establishment of quarantine and the pest-house.

"A dead body was taken out of the camp, and all who had touched it, or who had touched any person or thing that had been in contact with the corpse, must wash; also after contact with the body of an animal dead by disease.

"Next to the care of the person is that of dwellings. The presence of bad odors, of disease, or of mildew in a house, the law met with scraping, washing, changing the material of the worst parts, and if this did not avail the house was destroyed, everything being taken out of the town. Once a year, in the spring, was the feast of unleavened bread, when no ferment was allowable in any dwelling for seven days. For some days previous to the feast the housewife led her servants in a careful cleansing of the entire premises from all fermentable matter. This done, the head of the household, upon the eve of the feast, took a lamp, and the entire family following him, a solemn search was made in every corner and cranny to make it sure that no ferment actual or possible was anywhere present, a strict examination as to the entire freedom of the premises from anything decaying or that could decay. Every summer thus began with a perfect sanitation of one's premises, under the penalty of loss of the privileges of a citizen till it was done.

"The laws concerning food prescribed certain animals for food, and prohibited the use of all others; also, of any dying by disease or accident, and with particular emphasis prohibited the use of blood. Modern science has shown that the prohibited swine, rat, mouse, cat, and dog, are sources of trichinæ, and that the hare eats poisonous vegetables. Shell-fish were forbidden, and passing over their indigestibility, we have found them deleterious, even poisonous, at certain seasons, and so we refrain from the use of oysters for one-third of the year with true Jewish particularity. A Hebrew could eat only those fish having scales, and it has been shown that eels and other scaleless fish absorb poisons, and while containing them are dangerous articles of diet.

"Nature would seem to prohibit the drinking of blood, but if men will use it, then the knowledge that disease germs are surely in it, if in the system—that the venous half of it is full of the waste of the body, and that in it are poisons which, if not eliminated by the proper organs, speedily cause death—should induce the enactment of special laws against its use.

"So far as modern science has gone, its proofs

of the wisdom of the Mosaic prohibitions lead to the conviction that these prohibitions all stand on equally good footing, and if our sanitary laws do not prohibit the same, it is because we are behind the times. As to the use of alcohol, an allusion only is necessary. We all know that the Bible is one of the most thorough temperance books, and its descriptions of the physical, mental, and moral effects of alcohol are thrilling in their truthfulness.

"The dry-earth system is the best yet devised for its purpose, and while the Hebrews were in camp this was the course prescribed to them. Filth was scattered on the ground and covered. In their closely-built towns, that chief pet American nuisance, the household privy—so carefully kept as offensive as possible—a jealously-guarded American right, which, wherever we go, sends out its fragrance on the evening air—was unknown. They had public places which were frequently emptied, dry matter of various kinds being added for convenience in the removal. This method also prevailed among other nations, and we find a common threat of kings for punishment and disgrace was that the offender should die and his house be made a dunghill—a public convenience.

"As cities grew in size, the disposal of filth became a more important matter, and a place was chosen where it was consumed by fire. At Jerusalem the offensiveness of this place being continual and the fire perpetual, its name became a synonym for hell. Though all these precautions were taken against contamination of the soil in towns, yet wells were never dug inside the walls, and it is noteworthy that the water supply, whether from wells or springs, was without the walls. Cisterns for rain-water were within them, and were provided to meet the exigencies of a siege.

"Mosaic sanitation had one more provision. Much sickness and much of the liability to disease in this country is due to the physical and mental exhaustion resulting from the strain under which we all work. The three great Hebrew feasts of the year, each covering seven or eight days, afforded seasons of rest and recreation, and they occurred at the beginning, during, and at the close of the summer's work. The observance of the weekly Sabbath was the most imperative observance of all, and its breach the first noted. Whether the keeping of one year in seven as a Sabbatic year should be ranked with the sanitary measures, is an open question.

"If I have succeeded in my attempt, it is now plain that thorough sanitation was a religious duty of the Hebrew, and as such, it constitutes a part of our Bibles. Some may plead that it was all swept away with the rest of the ceremonial law, but we have at least the Christian precept to abstain from things strangled and from blood; and it is not to be hastily admitted that a system of rules, based on reasons as good now as then, has been summarily abolished, while the reasons remain. That part of the ceremonial law which was fulfilled in Christ has passed away. That which is unfulfilled, not pointing forward to anything, but a helpful law for all men, everywhere and always, should in all reason remain.

"The first question is, whether the laws or facts of sanitation which we proclaim are truly such. The Bible gives us a quasi-certificate that they are, and we believe them so. We believe that the presence, or an atmosphere, of filth lessens human powers, certainly shortens life, and may at any time suddenly terminate it. We believe the seeds of some diseases float in the air, that the seeds of others are in drinking water, and that they enter the system by the help of these agents. We believe that these germs can be destroyed. We believe that in a perfect state of physical health the seeds of most diseases cannot get a foothold in the human body, but that filth is a most powerful agent to so weaken the body that disease germs can readily grow. We believe that filth—using the word in its broad sanitary sense—is to-day mowing down the human ranks as minie-balls mow down the ranks of an army in battle.

"If these things are so, then any locality containing filth is like a loaded firearm. I may fool with it and, as usual, not believe it is loaded, but when it goes off I am dead nevertheless; and the same verdict should be rendered as in the case of the others, 'died for lack of sense,' and I am a suicide. Again, fooling with a pistol, I may point it at some one else—the state of my premises may injuriously affect my neighbor—and manslaughter is the result. I have an impression that one State has made the pointing of a firearm, whether it is loaded or not, at another a felony. It ought to be so in every State. I have no right to put lives in jeopardy; and so I have now come to only the utterance of truisms, and quote one: 'My neighbor has no more right to kill me with a stench than with a bullet, with water containing typhoid germs than with water containing arsenic.'

"The truths which are the foundation of these utterances lay a responsibility upon us, and where there is responsibility there is corresponding duty. Human life is *sacred*, not merely valuable. Human laws can only reach positive acts and proved intentions. Divine laws go deeper, and impose more and heavier obligations. It is my duty to preserve my life, to preserve it as long as possible. To allow myself to be killed when I could prevent it, is to commit suicide, whether the death comes by the hand of another, or by so-called accidents or mistakes. If any ignorance leads to death, it is a culpable ignorance.

"Whatever tends to injury is wrong, and it is duty not only not to do it but not to tolerate it—to remove it if it is a thing. Cleanliness is next to godliness, because godliness preserves the life of the soul, and cleanliness preserves the life of the body. The 'Thou shalt not' of the Commandments mades the refraining from the specified acts a religious duty. To refrain from murder, stealing, and other injuries, and from acts tending to them nearly or remotely is a religious duty.

"Now, to dispose of filth in a certain way makes an end of it. Disposing of it in another way, death or sickness results to some one. Knowing this, if I take the second way am I not guilty of indirect murder or theft?—for sickness deprives of property and of time, which is money. If a number of bricks are set on end in a row and so that the end one can do some damage in falling, does my responsibility for the damage vary

according to the distance of the particular brick from the end which I may choose to tip over? He who touches off a barrel of powder is a Guy Fawkes, but if a fuse sufficiently long is connected with it, and he only fires the end of that, he is guiltless. Such seems to be the reasoning of some in this matter, the question being merely one of time, of the difference between one link and a chain of causes and effects.

"The characteristic of the Christian religion, the feature distinguishing it from all other religions or irreligions, is its unselfishness, or rather its benevolence. Selfishness has no place and the Christian religion makes duties to our fellowmen equally binding with our duties to God. This is the reason for the assertion contained in the title of my paper, and this being stated, my assertion follows as a matter of course. As I am responsible to God for my life and health, and that of my family, I must obey all the rules of sanitation as to my premises and property; it is my duty to learn these rules, to so keep my premises that my neighbor shall suffer nothing from them, and to cause others by instruction and persuasion to do the same by themselves and their neighbors. Failing in these duties, I am a suicide or murderer or particeps criminis, ugly as it sounds. But how much more agreeable than a cut-throat is he who is debased so near the level of a beast that he can live in filth and will do it, though at the cost of the lives of members of his family? The use of soap is an index of civilization, and one who, brought up in a Christian country, is filthy in his habits or surroundings merits the name which Mohammedans give us—a Christian dog.

"As we advance in Christianity and do our duty, we more and more obey the rules of sanitation. Doing our duty, the plagues of cholera, yellow and typhoid fevers, etc., shall not come nigh us. Afflicted with them as we now are, with all our superior knowledge, we are living on a lower, less civilized plane, than the ancient Hebrews. As Christians, our lives should be lives of warfare against sin and of constant fighting with dirt. Conquered though we be at the last, it shall not be such an ignominious foe as dirt; and when we lie down in a good old age, there will be no cause for us to utter the lament of the woman immortalized in the 'Housekeeper's Tragedy:'

"'With grease and with grime from corner to center,
Forever at war and forever alert,
No rest for a day, lest the enemy enter—
I spend my whole life in a struggle with dirt.
Last night, in my dreams, I was stationed forever
On a bare little isle in the midst of the sea;
My one chance of life was a ceaseless endeavor
To sweep off the waves ere they swept over me.
Alas, 'twas no dream! Again I behold it!
I yield; I am helpless my fate to avert!
She rolled down her sleeves, her apron she folded.
Then laid down and died, and was buried in dirt!'

"She should have known about cremation."

Dr. Wm. Cheatham, of Louisville, then addressed the meeting on the subject of "Near-sightedness; its Cause and Prevention," illustrating his subject by the aid of the magic lantern.

Resolutions of thanks by the visiting delegates to the hospitable citizens of Elizabethtown for the courtesies extended and the interest manifested in the work of the council; to the members of the Y. M. C. A., who had kindly tendered the use of their hall for the purposes of the meeting, and to the ladies and gentlemen of the city for the excellent music furnished, were voted, and the council adjourned to meet in Bowling Green next April.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Semi-annual conversational meeting, October 23, 1884, the president, E. O. Shakespeare, M. D., in the chair.

Dr. Francis Delafield, of New York, by invitation, read a paper on

The Pathology of Broncho-Pneumonia. (*See page* 637.)

Dr. Pepper said he had listened with very unusual interest to the paper of Dr. Delafield, in which he had so distinctly and concisely set forth his views on this very common disease.

He thought all who had listened to Dr. Delafield would agree with him in congratulating the author upon the clearness and force with which he had described a condition which had hitherto often been confused by prolix description and by want of definiteness in separating different anatomical conditions. In regard to the term "broncho-pneumonia," which Dr. Delafield prefers, he has proved by his anatomical studies of the infiltration of the bronchial walls and of the surrounding parenchyma, that this term is strictly applicable to the cases upon which this paper is based.

Dr. Pepper stated, however, that though chiefly from a clinical standpoint, he was inclined to prefer the term catarrhal pneumonia, as probably including the form described by Dr. Delafield, as well as certain other forms which seem to him to be necessarily included in a complete picture of the disease.

For instance, there are many cases in adults which begin with rigor, followed by high fever, with temperature of 102½° to 104° F., with cough hard and dry at first, and later with muco-purulent expectoration, with no very definite physical signs; careful examination will show local impairment of resonance, coarse crackling rales on deep inspiration, and weak vesicular murmur. This condition may be limited to the apex or to the neighborhood of the root of one lung, or may occur elsewhere. The cases have a duration of from eight to twelve days, and terminate by lysis with resolution, though not rarely some cough remains, and the lung is sensitive and prone to recurring attacks, which in subjects predisposed to phthisis may induce that disease.

It seems to me difficult to regard these cases as anything else than mild catarrhal pneumonia; for this type of pneumonia agrees with other catarrhal affections in the wide range of severity presented by different cases. On the other hand, there are cases much more common in children, in which disease extends from the bronchial tubes into the lobules to which they lead.

The commonly-accepted opinion that the lining of the alveoli and air vesicles are susceptible to catarrhal inflammation, appears to me well established. In such cases the disease may extend outwards to the peribronchial tissue, as emphasized by Dr. Delafield, and lead to secondary interstitial changes, and also in consequence of ob-

struction of the bronchi, atelectasis occurs; the aspiration of irritating bronchial products fills some of the alveoli, or finally they become impacted with the results of catarrhal inflammation of their walls. Subsequently, caseation with softening may give rise to small abscesses, with breaking down of the walls of the air vesicles or with perforation of the pleura, or inspissation may occur with reabsorption of infectious material, with the development of general tuberculosis.

It did not seem necessary to dwell upon the cases in which atelectasis occurred as a primary condition, with the subsequent development of pneumonic centres.

It seems to him impossible to consider catarrhal pneumonia without taking the comprehensive view which would include all the varieties above indicated; though the term of "broncho-pneumonia" as used by Dr. Delafield, might be most appropriate to the special conditions described by him.

Allusion was made to the very interesting physical signs attending the course of atelectasis in the course of catarrhal pneumonia of children or of adults, where considerable areas of the lung, or even an entire lung, might pass into this state, to be followed before long by the reëstablishment of respiration and the disappearance of the physical signs. Difficult questions of differential diagnosis may present themselves, requiring critical examination. From an allusion made by Dr. Delafield, it appeared that he regarded lobar pneumonia as being like broncho-pneumonia, induced by the ordinary causes of idiopathic inflammation. The argument does not favor all lobar pneumonia being a specific constitutional disease, or as dependent upon a special microbe, did not appear to Dr. Pepper to be conclusive, and he was glad to know, from the remarks of Dr. Delafield, that he holds the same view.

Dr. Bruen said he rose to call attention to the observations of Hamilton, of Aberdeen, in reference to the peculiar basement membrame of the bronchial tubes, which determines the chronicity of bronchitis, and probably the interstitial changes in chronic broncho-pneumonia. Hamilton, in speaking of the denseness of this basement membrane, gives it the importance of a fascia, which determines the direction in which the inflammatory products of bronchitis shall be absorbed, viz., by the lymphatics, rather than by free exudation into the bronchial lumen. The interlobular connective tissues are permeated with fibrous bands, which radiate from the fibrous coat of the bronchi toward the pleural surface. Dr. Bruen thought that if careful study of the lymphatics were made, the absorbed products of an acute or a subacute inflammation could be traced throughout the lung, finally leading to enlargement of the bronchial glands.

The importance of the basement membrane is further illustrated by the phenomena of pneumonikoniosis and anthracosis. Immediate absorption from the bronchial tubes does not occur; although the tubes are always exposed to carbonaceous matter as evinced by the blackened sputa, yet the tubes are unpigmented, the carbonaceous or organic dust being carried down into the alveoli, whence it is absorbed, and the whole parenchyma of the lungs and the bronchial glands are blackened, but always strictly in the course of the lymphatics.

In children of a strumous habit, forms of bronchitis of an obscure nature often occur. Congested areas near the root of the lung are recognizable—abundant mucous rales and frequently laryngeal spasm at intervals is an important symptom. These symptoms are often referable to enlargement of the bronchial glands, and the nervous symptoms are due to irritation of the pneumogastric nerves.

Dr. J. C. Wilson asked whether Dr. Delafield designed to describe one variety of a group of affections to which the terms broncho-pneumonia, catarrhal pneumonia, desquamative pneumonia, etc., are somewhat vaguely and interchangeably applied, or to include the whole group in his account, and under the designation of broncho-pneumonia. If Dr. Wilson had understood the paper aright, he thought it certainly had referred to an especial variety of the affection in question, for there are encountered cases which differ both clinically and anatomically from the disease described by Dr. Delafield, and in which the lesions spread not only in a direction internal from the affected bronchial tubes to the peribronchial structures, but also in the direction of the long axis of the tubes to involve the terminal (sub-pleural) vesicles, and this, according to widely-accepted views, often without antecedent atelectasis.

Dr. Carpenter said that he had very little, indeed, to give of value in a pathological discussion, but would say, at the same time, that after thirty years' experience he had arrived at certain conclusions, not perhaps new, but which had been gathered in one set of cases, viz., anthracosis. They are a very striking set of cases. They all originate in a bronchitis, which differs from the ordinary form of that disorder in one very striking symptom, viz., great oppression of breathing. This oppression is far greater than can be accounted for by ordinary bronchial inflammation. It depends on interstitial disease or peribronchitis. A true broncho-pneumonia is set up, the cause being a special one, viz., inhalation of coal dust. In these cases so great obstruction to the circulation is caused by the interstitial exudation that the circulation is very seriously embarrassed. The heart suffers—dilatation, or hypertrophy with dilatation, is produced, and a form of dyspnæa, known as miners' asthma, occurs. These cases are essentially chronic ones. He had only the day before seen a patient die with this disease who had been under his care for several years, and in whom no lesions but those of peribronchitis could be detected.

Many of these cases, however, in a chronic progress, do develop all the symptoms of phthisis. Slow alterations of structure occur, cavities form, and all the pathological conditions of the so-called fibroid phthisis are found on post-mortem examination. He, therefore, claimed that these cases are entitled to constitute a special form of broncho-pneumonia. He agreed with Dr. Pepper that acute or sub-acute broncho-pneumonia left sensitive areas, leading often to subsequent phthisis. In his observation, fibroid phthisis was not a true tuberculosis, but a chronic degeneration of lung-tissue, due to a pre-existing broncho-pneumonia, such as he had observed in anthracosis.

Dr. Osler said that his experience in many points tallied with that of Prof. Delafield. In the broncho-pneumonia of adults the pneumonic process, he believed, most usually spreads from the bronchi. He referred also to those cases of broncho-pneumonia which followed brain injury or disease affecting the pneumogastric centres. In such cases the disease was deeply seated, and we find that the morbid process often surrounds the bronchi, but does not involve the terminal alveoli. The reverse is true in the case of children, in whom the disease is more peripheral, is nearer, and may be just beneath, the pleura. He was glad that Dr. Carpenter had raised the point as to anthracosis. Dr. Osler had been able to examine several cases of this affection in its very earliest stages, and could testify that it begins in the bronchi and thence extends to the peribronchial tissues. It is primarily then a broncho-pneumonia, and in every case he had found small disseminated black lumps resulting from localized broncho-pneumonia, which, by their fusion and extension, produce a form of fibroid phthisis.

Dr. Tyson had little to add to what had already been said. He had, however, first expressed his gratification at the simple clearness with which Dr. Delafield had presented the question. Dr. Tyson had been very much impressed with the diversity of nomenclature of the disease under consideration, and it would be useful if we could agree upon some common term. For a long time desquamative pneumonia had seemed to him to be the best term, but from a study of the pathological histology, he thought the term peri-bronchial pneumonia more suitable. If now the adjective desquamative be added, we have a term which will be still more comprehensive and exact. Dr. Tyson thought that our understanding of the enormous peribronchial cellular infiltration would be much simplified if we lose sight altogether of the idea that there is essentially any form of inflammation except interstitial inflammation. He had come to the conclusion that there is no such thing as catarrhal or parenchymatous inflammation, the phenomena usually considered characteristic of these being secondary. The wandering out and massing of leucocytes is the one essential factor of the inflammatory process. He would like to ask Dr. Delafield where he would draw the line between this process and tubercular phthisis. He presumed that Dr. Delafield agreed with all other observers in admitting that broncho-pneumonia does sometimes terminate in tubercular phthisis, and when this occurs it is often difficult to say where the broncho-pneumonia ends and where the phthisis begins, although the extremes may be easy of recognition.

Dr. Formad would like to ask the lecturer's instruction how to distinguish broncho-pneumonia in its *chronic* form from *tubercular* broncho-pneumonia. Like Dr. Tyson, he felt that he was unable to draw a line of distinction between the two affections. Indeed, Dr. F. was unaware of a non-tubercular form of broncho-pneumonia in man until he saw Dr. Delafield's excellent records and representations of this lesion; this being explained by the fact that Dr. F. dealt almost entirely with the dead, while most of the speakers had shown that although broncho-pneumonia in its *acute* form was a common disease, it did not prove fatal in the vast majority of cases, the patients either getting well or the disease assuming a chronic course.

Dr. Formad fully recognized *acute* broncho-pneumonia as an independent affection, although he believed to have observed this lesion *post-mortem* only in dogs such as induced artificially by means of forced inhalations of a spray containing irritating particles. Dogs with such artificial broncho-pneumonia (even if tuberculous sputum was resorted to to induce it) Dr. Formad had observed always to recover within a couple of months; but if the dogs were killed before the end of the first month after the operation, the post-mortem showed invariably an acute broncho-pneumonia not distinguishable from that described by Dr. Delafield as occurring in man. Throughout the lung substance are seen small nodes of irregular outlines, in size resembling tubercles.

Under the microscope these nodules are shown to consist of mere unorganized collections of cells, often in a state of retrograde change and mixed with mucus and débris; this exudate being limited to the lumina of the bronchials and their pertaining groups of air-vesicles (the acini) which they fill. On section these artificial boundaries give rise to the appearance of nodes. Very often epithelial cells and mucus from the bronchi have been seen intermingled with the purulent contents within the air vesicles; this suggests that the exudate contained in the latter may have been partly aspired from the bronchi (during forced breathing) and was lodged in the air vesicles as foreign material.

These lesions have been mistaken by stupid observers for true tubercles. *Acute* broncho-pneumonia in man appears to be a lesion perfectly anologous to the one described above in dogs. The human disease once becoming chronic, its distinction from tuberculous broncho-pneumonia ceases.

Dr. Delafield, in closing the debate, said that all the speakers had brought out what was one of the most difficult points concerning broncho-pneumonia, namely, its limitations. Strictly speaking, every pneumonia is a broncho-pneumonia, and the application of the term to a certain group of cases is of course arbitrary. He believed, however, that the name is most properly employed to designate the group of cases which he had described.

In anthracosis there is a chronic bronchitis and also a chronic pneumonia, but yet the lesion is not, properly-speaking, a broncho-pneumonia.

He did not believe that the inflammation traveled directly from the bronchi to the air vesicles into which they entered, but that the appearances which simulated this were due to atelectasis.

He thought that the term catarrhal pneumonia was a very bad one, and that the air vesicles were structures entirely different from mucous membranes.

He did not believe that broncho-pneumonia was a form of phthisis or led to phthisis, but that phthisis had its own special anatomy from the very beginning.

PHILADELPHIA CLINICAL SOCIETY.

Stated meeting held September 26, 1884.

Dr. Clara Marshall read a report of two cases of imperforate anus with recto-vaginal fistulæ in the adult. The paper was reserved for publication by the reader.

A case of

Atresiæ Vaginæ with Retention of Menses

was reported by Dr. E. E. Montgomery. Miss F., æt. 44, single, of healthy parentage, was brought to my office July 5, 1884, by Dr. Sibbald, of Wissahickon, with the following history: She commenced menstruating at 16 and continued without disturbance until her thirtieth year. Two years previously, she had fallen upon a curbstone, receiving quite serious spinal injury, which lasted a year when she fully recovered. The menstrual periods, which were always regular, lasting from three to four days, normal in quantity and color, at thirty became painful. Since then the pain has been constant and increasing with each period. The discharge now lasts from seven to ten days, is of a dark bloody nature, and offensive odor. During the menstrual intervals, there is a continuous discharge of "corruption," as she calls it, necessitating the constant wearing of a napkin, and producing excoriation. All of these symptoms have been increasing during the past eight years, and she has been compelled to discontinue work a week or more at a time. She complains of a sensation of weight or pressure in the pelvis, attended with severe pain during defacation. There is no pain during micturition. Her nervous system has become much affected. Upon examination, the vagina was found relaxed, and the external parts red and bathed with secretion. The vagina was about two inches long ending above in a lateral cicatrix. No uterus could be felt. Upon withdrawal, the finger was found bathed with a dark, thick, highly offensive discharge. The use of a Sims's speculum disclosed a cicatricial line running from side to side across the fundus of the sulcus, just posterior to which the membrane looked thinner. Slight pressnre against this with a sound perforated it, and was followed by a profuse discharge of broken-down blood and pus. A pair of Ellinger's dilators were then introduced and spread to their full extent; over four ounces of the fluid flowed out. The cavity was then washed out with a carbolized solution. In this cavity above the cicatrix the uterus was found retroverted and firmly fixed, forming the roof. The cavity was dressed with carbolized glycerine on cotton. Subsequent treatment was conducted by Dr. Sibbald. He informs me that there has been no difficulty since, and that she now feels perfectly well.

Dr. W. H. Parish: That the treatment adopted in this case was proper the result showed, though it was not in accordance with the treatment directed by the text-books. We are there told to puncture the cavity with a trocar and draw off the confined liquid drop by drop. This is undoubtedly wrong, and its disadvantages have been demonstrated in my own practice. The crucial incision is undoubtedly best.

Dr. Collins related the details of a case treated in the manner of the text books by exploratory needle, trocar, and drop by drop drainage. The cartilaginous membrane acting as septum was one and a half inches from the vulva and probably congenital. A crucial incision was made after drainage and the corners cut off; and no further trouble was experienced by the patient.

Dr. Montgomery, in closing the discussion, said: As Dr. Parish has said, the free incision is best, though it was precipitated in the case related by an opening occurring during examination. The danger of septicæmia is certainly increased by a small opening. A particular point of interest in this case was the lateness in life and the time that elapsed between the injury and the retention.

G. Betton Massey, M. D.
Reporting Sec.

Editorial Department.

Periscope.

The Treatment of Neuroses of the Viscera.

Dr. Clifford Allbutt thus terminates his excellent lectures on "Neuroses of the Viscera:" Although the basis of all therapeutics must be a clear diagnosis, yet, on the other hand, the most elaborate diagnoses are but laborious idleness if not made the means of cure. We cry out with the child in La Fontaine,

> "Eh! mon ami, tire moi de danger
> Tu feras, après, ta harangue!"

The beginning of all successful treatment must be to convince the patient of the true nature of his malady. Now, your neurotic is one who has no reserve. This want is probably due to a congenital instability of nerve, showing itself as waste, so ceaseless, that the reserve once dissipated is never reaccumulated. This reserve may have been spent in beneficent activities; or it may have been dissipated in fidgets, fretfulness, or shrewishness; in sleeplessness, in anxiousness, or in pain, according to the quality of the person. We are disposed to forget that the silent work of nutrition uses more force perhaps than many people expend in their neuro-muscular life; hence the early failure of the digestive resources in neurotics, hence the fall of the balance of nutrition below the needs even of a controlled expenditure. We know that good nutrition is the main source of steady work, good temper, and self-control; we know, too, that to trade daily only upon the supplies of the day is to court collapse; we must have more brain, more spinal marrow, more liver, more kidney, than we want for the day. must have stored-up force, partly for greater occasions, partly to secure the equable running of our machinery. A neurotic person is an engine with a light fly-wheel and a small furnace, whose work, therefore, is fitful and unsafe. In the early life of neurotic subjects, especially, we must hus-

band the reserve, we must control expenditure, and cherish nutrition. To heap up again a wasted reserve is always a long and laborious task, and, as years go on, becomes harder and harder. Many people, even when under middle age, never wholly replace their reserve, if wasted, let us say, by acute disease; so that this factor of steadfastness and safety is never wholly replaced. In an exhausted neurotic, the secret of treatment therefore is—by food, fresh air, exercise, and happiness—to lift up your patient from the invalid-couch, not for the day or for the month only, but to teach him so to manage expenditure and so to promote nutrition as to replace his capital. He must establish in himself the habit of a cool temper and rhythmical work, and root out the habit of wasting volumes of good worry upon forecasts of events which never happen, and on visions of unsubstantial things.

Unhappily, however, nine neuralgics out of ten are possessed by the belief that they are dyspeptics, and that the cure of their malady is to be found in some farther defalcation of their diet, in some new arrangement of it, or in the use of some new combination of stomachics. Once convince them that the stomach is the seat of neuralgia, and that any pain caused by food is as accidental as is the increase of pain in tic douloureux during the act of mastication; once let them realize that, so far from waving their dishes aside, like the physicians of Sancho Panza, you would rather prompt them to indulge as liberally as their impaired forces will permit; once persuade them to throw all their alteratives, their pepsines, and their mineral waters, to the dogs, and your battle is half won. I cannot read the lives of men like De Quincey or Carlyle without suspecting that a timely or untimely course of Fowler's solution would probably have deprived us of the letters of Mrs. Carlyle and of the "Confessions of an Opium-Eater." Assuredly a gastralgic can no more eat a good dinner than he can walk a league; but by careful advances, and the repetition of small, light, highly nutritious and social meals, he will eat his way upwards. The first dread of food over, he will begin to digest *con amore*, and he may perhaps be helped to this end by the aid of pepsine, though my patients seem to do nearly as well without it. In severe cases, the warmth of bed for a few days, or even for two or three weeks, is of great value; economy of work and economy of heat is thus secured. Many a case of neuralgia which had resisted all medicines, has been cured by a course of bed alone. The very common association of cold extremities with gastralgia, and, indeed, the oft-noted influence of chilled feet in setting up an attack, is an indication of the need for equable warmth. Dwindled meals fail to supply both heat and nutrition; and in extreme cases the Weir-Mitchell system, by stimulating nutrition, may reopen the fountains of warmth and vigor. The visceral neuroses again, like the rest, are aggravated by cares and sorrows, and by depressing conditions of life. Release from toils or worries, and a change of air and scene, take a leading part in the cure. Gastralgics as a rule do better inland than at the seaside. At the sea they are apt to become irritable or sleepless; but these ill effects are lost on withdrawing a mile or two inland. On the other hand, the high mountains are not favorable to neurotics; they fare ill at St. Moritz and Davos. Milder upland airs like Malvern or the Sussex Downs (dry sunny slopes a little remote from the seashore) suit them best. For how many patients can we write the prescription—to take two months' holiday, to withdraw from all toil and care, and to live in good company on refined and delicate food? And yet how potent are such means when all else may fail! Mr. Teale and myself tried in vain to cure a clever, impulsive, and overworked Leeds clothier of gastralgia, mixed with some actual dyspepsia, until we sent him on a sea-voyage. His own words on his return were: "After a few days, bile could not live in my stomach, and my tongue was as clean as if I had manufactured it myself." The only things necessarily to be forbidden are tea, coffee, tobacco, and the stronger meats, such as beef. Over many persons thus susceptible, tea has an evil power; it retards the pulse, and creates the horrible empty exhausted feeling, which seems as hard to bear as very pain. Alcohol I do not encourage in neurotics; that there is a little occasional help in it, I admit; but, on the whole, alcohol, drawing as it does upon the reserve fund which we wish to protect, is better away from persons who may learn to take it rather as a dram than as a small addition to meals; this error, in them, is a radical one. A like danger may follow the use of morphia, but severe cases cannot be treated without it. The repeated attacks so exhaust the patient, that it is only by economizing his forces with warmth, rest, and morphia, that he can retain any for the absorption of his food. Morphia may be given fractionally in ordinary mixtures, or periodically in larger doses, but in either case the remedy should be kept under the control of the doctor; in many cases it is even well to keep the patient in ignorance of the agent. For this reason I often order Dover's powder in pills, in order that the compound may not be recognized in the prescription as opium. Of other drugs, arsenic in gastralgia takes by far the chief place; indeed, it is hard to say how gastralgia was cured before the time of its introduction by Dr. Leared. Yet, even now, its power is not sufficiently well known, for, on turning to Dr. Ross's work on the "Nervous System," which I suppose to be the best in our language, I find no record of arsenic as a remedy for gastralgia; and Dr. Spender's rules for the use of the drug are too timid. Yet, after all, with soft nutritious food, warmth, rest, and lenitive or narcotic doses of opium, many cases of gastralgia still resist treatment. Oddly enough, a repetition of small blisters to the epigastrium may then be of service; and of other drugs, quinine, boldly pushed on, with belladonna, form a valuable combination; and so, again, do quinine and bromide of ammonium dissolved in hydrobromic acid. The infusion of the Prunus Virginiana makes an excellent vehicle for such mixtures. Not uncommonly gastralgia is a product of malaria. Of this nature I have two cases before me, and in one of them very large doses of quinine cured a most intractable gastralgia, which had resisted all other measures. Luckily, I knew my friend had traveled in the East, and had had ague there. The silver salts, again, are of undoubted use; with nitrate of sil-

ver I cured one case which had defied all my previous measures; of manganese, I have no experience. Of iron, I speak last; it has only been of much use to me in a few cases, for I do not, in fact, observe that anæmia, apart from the general lowering of all nutrition, has been so marked a feature in my cases of gastralgia as many authors definitely assert of their own. Where any distinct anæmia exists, iron, of course, is indicated, and often works a cure. Phosphorus is not so useful in gastralgia as its kinship to arsenic would lead us to expect; but the pharmaceutical compounds of hypophosphites now sold do, by virtue of some one or more of their constituents, seem to answer well. As the stomach gains vigor, cod-liver oil should be added to the dietary; it will help on nutrition and forward recovery. In a word, arsenic and quinine are the only specifics; and the rest of the treatment may be summed up in rest, sedation, nutrition, and tonics. Some gastralgics find that alkalies give them a temporary relief from pain, even in cases of neurotic and periodic type. It is not generally so, however, and the practice is not a sound one. When we leave the vagus nerve, when we leave asthma, angina pectoris, and gastralgia, we find that the specific powers of arsenic are no longer so trustworthy. In enteralgia it may have some value, but far less than in gastralgia; in enteralgia, quinine and belladonna seem best to forward restoration, though arsenic is, even here, by no means to be despised. In all visceral neuroses a most careful search must be made for any kind of peripheral irritation, and such irritation soothed and its causes averted. Of the infinite pains, moral and dietetic, which are needed for vomiting cases, I need not speak, for the management of them is sufficiently well known. The only unfamiliar drug which I can recommend for these cases is the walnut-spirit sold by Messrs. Corbyn and others. This medicine, which was indicated some time ago in the *Practitioner*, I have certainly found very useful in cases of neurotic vomiting. It must also be remembered that gastralgic vomiting is spasmodic asthma of the stomach, and that a few whiffs of chloroform, or a little subcutaneous morphia, may cut the one short as well as the other.

The Value of Recent Researches on the Blood-Corpuscles in the Pathology of the Anæmic and Lucæmic Diseases.

Before the last International Medical Congress, Dr. Laache (Christiania) read a paper on this subject. He said that the importance of the more recent methods of research on the blood-corpuscles lay in the greater precision with which the anæmic state could be perceived. By means of the methods introduced by Vierordt and Welcker, and improved and greatly simplified by Malassez, Hayem, and others, the physician was enabled to determine with accuracy not only the relative number of blood-corpuscles, but also the condition of the coloring matter of the blood.

1. In anæmia following hemorrhage, the number of red corpuscles, as well as the amount of hæmoglobin in the blood, might fall far below 50 per cent. without death being an immediate result, and without restoration to a healthy state being impossible, even when fresh blood was not added by transfusion. During recovery, the hæmoglobin was not, as a rule, formed so rapidly as the blood-corpuscles. In other forms of secondary anæmia, apart from complicating hemorrhages, the reduction of the amount of the blood was in general relatively small; cancer was an exception, but only when the nutritive power was essentially impaired.

2. In chlorosis, two forms must be distinguished, according to the condition of the blood-corpuscles; in one, pseudochlorosis, the blood-corpuscles were not at all, or in any case only very slightly, affected; in the second, true chlorosis, the alteration of the blood-corpuscles was beyond doubt, and sometimes very considerable. In the latter, as a rule, not only the coloring matter of the blood, but also the number of red corpuscles, was more or less reduced, especially the coloring matter. The diagnosis of the two forms was of practical importance, as it was in true chlorosis that iron exercised its well-known influence. The use of large doses of this medicine was attended by an active new formation of red corpuscles and of hæmoglobin, especially the latter.

3. In pernicious anæmia, the number of red corpuscles might fall below half a million in a cubic centimetre, without the immediate occurrence of death, and without the impossibility of recovery. In this disease, the condition of the red corpuscles was peculiar in this respect, that they were, on an average, larger and contained more hæmoglobin than in the normal state.

4. While the proportion of the white blood-corpuscles was inconstant in all the above-mentioned diseases, in leucæmia their increase was a predominant symptom. Their size was, for the most part, greatly altered. The red corpuscles might, even when the disease was strongly developed, retain their normal proportion; and, even when the disease had lasted for years, the reduction in their numbers did not of necessity reach an extreme degree in the three diseases mentioned above. Arsenic had a destructive action on the white blood-corpuscles.

Mud Baths.

Dr. O. E. Davis thus writes in the *Cinn. Lancet and Clinic*, October 11, 1884:

The principal mud baths of which we have any knowledge are in France, Germany, and Italy, a few resorts in each, and at Hot Springs, Arkansas, and Las Vegas, New Mexico, on our own continent. The *mud holes* at the thermal springs in New Mexico have been resorted to by the natives for over three hundred years, many of whom would travel on foot hundreds and thousands of miles to reach their favorite mud.

At these resorts, when mud-baths are given it is certainly in a very old-fashioned, primitive way. A cavity is scooped out of the mud, sufficiently deep to allow the body of the patient being received in it, the head and shoulders being slightly raised. Quite recently at Las Vegas they have some wooden tubs in a wooden shanty, where mud baths are given.

Mud baths excite the skin much more than liquid baths; they cause a greater degree of redness, bring out more eruption, and stimulate both the vascular and nervous tissue of the skin.

Mud baths are more active in their operation upon the human frame than those of the mineral waters, owing in part to the concentration of the saline principles and the greater pressure and tenacity of the application.

These baths are used not only with marked benefit, but with wonderful effect, in chronic cutaneous diseases, nervous affections, rheumatic gout, and in the stiffness and contraction of joints, the results of rheumatic gout.

Miraculous cures have been effected by their use in a great many ataxic difficulties, neuralgia, and paralysis, together with all forms of blood diseases, such as syphilis, scrofula, etc.

Having myself been for nearly five years a sufferer from blood poison, received in an operation for necrosis of tibia, and having consulted the best surgeons in America, whose directions and prescriptions I had honestly and faithfully carried out to the letter, and after having tested sea air and baths, and visited the Hot Springs of Arkansas, and the Mineral Springs of Michigan, being still an invalid, I was induced by friends to go to Las Vegas, New Mexico. When I reached the place I was suffering from a large ulcer upon the left wrist, involving the lower end of the ulna, the carpal and metacarpal bones. I had also numerous large ulcers upon the scalp, and a large one on the spine of left tibia, and a very painful exostosis of the internal malleolus of same limb. I was suffering greatly from rheumatic and neuralgic pains all over my body, and felt myself to be a total wreck, and that the time had come for me to pass to that undiscovered country. But thanks to the mud baths of Las Vegas, I am restored.

While taking the baths (of which I took sixty-eight), and watching closely their effects upon myself and numerous others, I was led to exclaim, Eureka! and reasoned in this manner with myself: I am poisoned; it makes no difference what the nature of the poison may be, it enters the circulation and floats with the blood to the entire organism, producing all the peculiar effects known to science of each particular poison. How am I to get rid of it? The system has but three channels through which poison may be eliminated, the bowels, the kidneys, and the skin.

The skin is the emunctory par excellence, and the huge poultice of mud opens the exhalants of the skin, and the poison, whatever it may be, is eliminated or deposited in the tub. These baths of mud at the springs are made of earth found near by, and through which the hot mineral waters have percolated for ages. The earth is a mixture of organic and mineral matter with vegetable debris.

These deposits are not inexhaustible, and the time is not far distant when it will all have been used.

The idea occurred to me, that organic matter, mud, bog, or peat, found in any locality, could by medication be made equal, if not superior, to the mud in use at the springs.

Medicated mud baths may be acid or alkaline, saline, sulphurous, ferruginous, mercurial, iodated, or bromated.

The mud now in use is made by medication, the same as the Las Vegas mud, but physicians can have them medicated according to their own formula, to suit each case.

Eucalyptus as a Dressing in Surgical Cases.

Dr. George F. Beasley thus writes in the *Fort Wayne Journal of the Medical Sciences* for October, 1884:

In all surgical dressing, the main features to be kept in view are simplicity and effectiveness.

By simplicity, I mean those that require no cumbersome or complicated means for preparation, that can be applied by the laity, or if needs be the patient.

To be effective, they should limit or relieve pain and inflammation, check sloughing, prevent or limit to the minimum the formation of pus, disinfect and counteract the poisonous, offensive odors arising from decomposing tissues. Lastly, they should be as cheap as possible. This is the goal towards which all have striven during the past, and are yet pressing on in search of.

When Lister brought out and demonstrated his manner of surgical dressing, when he so extolled the virtues of carbolic acid, it seemed as though we had "found a pearl of great price."

But time and practice demonstrated the complicated minutiæ as taught by him were not necessary.

That cleanliness and free drainage, with disinfecting applications, were the ends to be sought.

That some persons were so unhappily constituted that carbolic acid was an irritant of such degree as to preclude its use. Among these unfortunates is the humble subscriber. With him, be the solution weak or strong, the result is the same—the development of an eczematous eruption on the hands which was far from conducive to an amiable temper, and caused a waste of words which might have been put to much betteruse.

I then found that for cleansing purposes plain hot water did as well as the carbolized, and the odor was much sweeter.

I then looked for something to replace the great disinfectant (carbolic acid). Iodoform, occupying as it does a prominent place in surgical therapeutics, was tried, alone, mixed with various substances in form of powder, and in ointments of varying strength.

But the diabolical odor which hung around, making life a burden to the sufferer and rendering him a nuisance to all in the vicinity, bade me seek further.

I tried the various balsams alone and in varying instances, with generally good results; but they were objectionable on account of their adhesive properties.

Eucalyptal preparations, occupying a prominent place as disinfectants, were tried with a result that pleased as well as surprised me; and so well have I been satisfied that I have used them almost exclusively ever since.

The preparation I have most used is the fluid extract, using it with various tinctures and with alcohol, forming a saturated tincture.

The mixtures which I have found of the most use are: with tincture opium, tincture ammonia and balsam fir, and mixed with cosmoline, making an elegant ointment.

In cases where there is contusion as well as laceration, the combination with tincture arnica gives the best results.

In injuries of the distal phalanges, when there is much suffering from the injury to the nerve

filaments, the combination with tincture opium relieves the pain. When there is laceration without contusion and incised wounds, I use it with alcohol. When first applied, it produces a slight stinging and in some slight burning sensation, which soon passes away. I use it in the following manner:

First, carefully cleansing the wound of all foreign matter with water as hot as comfortable—not the scalding-hot as recommended by some. Carefully examining all the soft tissues and placing in the position that will the least interfere with the circulation, then over it pour the solution, being careful that it penetrates all the recesses, and that all the raw surfaces shall be bathed. Then apply over the whole a layer of marine lint, which is to be kept moist with the mixture. The dressing is to be changed when the discharge makes its appearance at the edges, or there are constitutional evidences of imprisoned pus. Then remove, cleanse, and carefully re-apply.

It being slightly astringent, there is, during its use, a notable absence of the exuberant granulations so common in this class of cases. By its use, I am fully satisfied that the period of convalescence is materially shortened, and there is a notable absence of those odors so common in these cases. Under its use, when there is sloughing, the sphacelated mass becomes mummified, and is almost odorless. I have tried the preparation eucalyptol or the oil, but have found it was no better, while the cost was increased.

I might go on and give the treatment of various cases, but as that would be adding insult to your weariness, I desist.

Since I read the foregoing letter before the Society at Springfield, I have found this formula does the best:

℞. Fluid extract eucalypti, 2 ounces.
Alcohol, 6 ounces. M.

When used with the other tincture, the dressing becomes hard and difficult to remove. This is obviated in the above.

The Pathology of Uræmia.

The *Lancet*, September 27, 1884, very truly says that "the pathology of uræmia reminds one of attempts to thread a needle in darkness, the distance of the point of the thread from the eye of the needle being very difficult to determine. One year we are informed on good authority that urea may be injected into the system without serious results, and the next year the direct opposite is affirmed. This is but one aspect of the many-sided subject. The chief dispute in the pathology of uræmia is as to the nature of the toxic agent. MM. Gréhant and Quinquaud have returned once more to the question, and in an experimental method. Subcutaneous injections of aqueous solutions of pure urea have been employed in gradually-increasing quantities on frogs, guinea-pigs, rabbits, pigeons, and dogs. The result was constant for the different kinds of animals, and consisted in a more or less rapid death from tetanic convulsions, similar to those produced by strychnia. The most numerous experiments were performed on dogs. The toxic dose of urea in the blood was fixed with exactitude, and the influence of urea on muscular contractility was studied. Death always ensued when a dog received into its system 10 grammes of urea for every kilogramme of body weight, or, in other words, when a hundredth part of the body weight of urea was injected. The proportion of urea in the blood, as estimated just before or after death, was .6 gramme for every 100 grammes of blood, and the relative proportion obtained in all the other animals employed. In a case of anuria in a man the proportion of .410 per 100 grammes, and in another case of retention of urine .278; in a case of interstitial nephritis, the patient suffering from uræmic dyspnœa, it was .210, and in a case of uræmic coma, .215. Under the circumstances of the experiments, all the tissues of the animals were impregnated with urea, so that 100 grammes of blood yielded 613 milligrammes of urea; 100 grammes of liver, 580 milligrammes; 100 grammes of cardiac tissue, 311 milligrammes; 100 grammes of spleen, 662 milligrammes. The observers always noticed that the urea injected under the skin was never completely absorbed, even at the time of death, though death might have been delayed for ten hours. By exposing the sciatic nerve, and displaying the calf muscle, to the cut tendo Achillis of which a dynamometer was connected, the authors decided that uræmia does not increase or diminish muscular contractility. The blood of the dead animals, when submitted to distillation at a temperature of 40° C. *in vacuo*, furnished a liquid absolutely free from ammonia; the conclusion drawn from this experiment is that urea does not act as ammonic carbonate.

The Pathology of Myxœdema.

Before the last International Medical Congress, Dr. W. B. Hadden (London), in a paper on this subject, said that myxœdema was a disease characterized by a general swollen condition of the body. The appearance of the patients suggested ordinary dropsy, but the parts did not pit on pressure. The face was swollen and puffy, the lips and alæ nasi thickened, the eyelids œdematous-looking, and on each cheek there was a well defined flush. The general expression was placid and inert—in a word, cretinoid. The skin everywhere was dry and harsh; perspiration and the secretion of the sebaceous glands were almost absent. The hands were broad, clumsy, and spade-like. The hair was soft and scanty, and tended to fall out. The nails and teeth shared in the general mal-nutrition. The thyroid gland wasted, although it was difficult often to determine this, in consequence of the swelling of the tissues of the neck. Soft masses were usually to be felt in the supra-clavicular regions. The temperature was almost constantly sub-normal. The speech was slow, thick, monotonous, nasal. The tongue seemed to be too large for the mouth. There was general muscular feebleness. The gait was slow and tottering, and all movements were retarded. There was marked mental lethargy. An indisposition to all bodily and mental activity was one of the most striking features of the disease. The urea excreted by the urine was much diminished, but, with this exception, there was no constant change. In the latest stages, albuminuria and

true dropsy might supervene. Somnolence, insanity, impairment of memory, disorders of the special senses, and certain subjective sensations, were frequently experienced. The tongue, uvula, soft palate, and larynx were generally swollen, and difficulty in deglutition was often observable. The appetite was bad, and defacation usually difficult, in consequence, probably, of swelling of the mucous membrane of the rectum. The disease usually attacked adult women, but it occasionally commenced before the age of twenty, possibly sometimes in childhood. It occurred among rich and poor. Climate and race were probably without influence. Syphilis and excess of alcohol had no share in its causation, but permanent mental disturbance and exhaustion from excessive childbearing were occasional antecedents. As regarded family history, phthisis was remarkably frequent, acute rheumatism and insanity occasional, and, in at least one case, myxœdema had been observed in the collateral relatives. As to morbid anatomy, the constant factor was a diminution in size of the thyroid gland. According to Dr. Ord, there was solid œdema of the connective tissue throughout the body, and a great increase in the amount of mucin; hence the name myxœdema. The author believed that the disease was probably dependent on change in the sympathetic nervous system, and he thought it not unlikely that the thyroid was in some relation with the peripheral sympathetic nerve-fibres. This view had recently been borne out by *post-mortem* evidence. Improvement had occasionally been effected by drugs, especially jaborandi.

Case of the Restoration of the Natural Color of Human Hair, After Having Been Gray for Several Years.

Dr. Vandeleur C. Isdell thus writes in the *London Medical Times*, November 15, 1884:

"In conversation with Dr. George Harley, F. R. S., of London (during his homeward voyage from attending the recent meeting of the British Association in Canada), regarding the changes in color which occasionally take place in human hair, I mentioned a curious circumstance in connection with the restoration of color with which I am intimately acquainted, from its having occurred in the case of my own father, Dr. James Isdell, of Dublin.

"The main features of the case are the following:

"In the year 1861, when at the age of 62, both the hair of his head and beard were completely gray; whereas in 1882, that is to say, 21 years later, when he died, at the age of 83, the hair of his head was of its original dark color, the whole of it being quite dark, with the single exception of a few gray hairs on each temple.

"Unfortunately, as regards the condition of the beard at the time of his death I can say nothing, from his having shaved it off many years previously, and never allowed it to grow again.

"I may mention that my father had been a teetotaller for upwards of 40 years, and that his mode of life had been an exceedingly regular one. Moreover, no constitutional or other reason, that I am aware of, could be assigned for this strange freak of Nature in restoring to its natural color my father's hair, after it had become decidedly gray; and it is on account of authentic cases of this unusual occurrence being exceedingly rare, that, at Dr. George Harley's suggestion, I send you this brief history of the case, as I think it may be useful to persons collecting data in connection with the anomalies of hair coloration."

Reviews and Book Notices.

BOOK NOTICES.

A Manual of Dermatology. By A. R. Robinson, M. D., etc. Cloth, 8vo., pp. 647. Price, $5.00. New York, Bermingham & Co., 1884.

The author in a measure disarms criticism by saying at the outset that this is not the *magnum opus* that he is preparing to offer the public, but a compilation prepared for a temporary purpose. Judged by that standard, it is well enough done. That is to say, it is the production of a well-read specialist, who has carefully considered the recommendations of the leading dermatologists, and has tested them in a discriminating manner in his own practice. It is a judicious rehearsal of what the best authors have to say on the symptoms, diagnosis, and treatment of diseases of the skin.

The paper, printing, and other details of the manufacture of the book, are quite satisfactory, except the printing of some of the illustrations, which betrays a negligence in underlaying.

The Science and Art of Surgery. A Treatise on Surgical Injuries, Diseases and Operations. By John Eric Erichsen, F. R. S., LL. D., F. R. C. S., etc. Eighth edition. Revised and edited by Marcus Beck, M. S. Vol. I. H. C. Lea's Son & Co.

Erichsen's "Surgery" needs no introduction from us. A text-book that for more than thirty years has steadily grown in favor with both practitioners and students is too well known and too highly esteemed to require laudation or to be exposed to criticism. It is sufficient to say of this edition that it has undergone a thorough revision not only by the author, but by several assistants in special departments, and by the general editor, who took especial charge of the portion on pathology. It is safe to to say therefore that the most recent conquests of this progressive art will be found incorporated. Such we have ascertained to be the case on an examination of the text.

We must express our regret, however, to find the work divided into two volumes, and each of them of a discouraging bulk. This first volume has 1124 closely printed pages. The distinguished author always pleased his readers with his happy faculty of condensing without forfeiting instruc-

tiveness. Now, between author, editor and assistants, that eminent merit is no longer present. Would that he had kept before his eyes the example of the great SYME, the last edition of whose surgery was shorter than the first, and it is needless to add, better also. It is a great deal easier to write with prolixity than with brevity, but the reader has to pay in more senses than one for the writer's amplification.

The Principles and Practice of Midwifery, with some of the Diseases of Women. By Alexander Milne, M. D. Second edition. Cloth, 8vo., pp. 371. Price, $2.00. Bermingham & Co., New York, 1884.

By the use of small type and a careful condensation of his material, the author presents in this handy little volume a full treatise on obstetrics. The illustrations are fairly good, and the typographical presentation of the text judicious.

The author belongs to the Edinburgh school of obstetricians, a school of ancient renown, and that still maintains its prominence. It has, however, some traditional beliefs and customs which are not accepted by the rest of the world. We do not know whether to attribute to such local influences, or to a want of recent revision, the backwardness of the chapters on anæsthesia, maternal impressions, and some others. The practical instructions, however, will be found satisfactorily set forth.

A Naturalist's Ramble About Home. By Charles C. Abbott. Crown, 8vo., pp. 485. New York, D. Appleton & Co.

What a world of animal life is in busy activity around us, even in thickly settled country places! What untiring sources of entertainment are furnished by its study! What extraordinary parallels do the passions and emotions of the lower animals bear to our own! What man with the use of his senses can complain of the dullness of country life!

Such are some of the thoughts that rise in the mind in laying down the volume whose title is given above. It is the unassuming record of one whom nature has admitted to her inner circle, of one to whom the songs of woodland birds and the hidden ways of the denizens of groves and brooks, and the mysterious night wanderers of the fields, are better known and better liked than the strife of the mart or the dispute of the schools. There are passages in it redolent of that intimate insight into nature's higher phases which Wordsworth possessed and Thoreau affected. But the author's insight is not merely that of the lover of nature. It is that of the scientific mind, as when he writes: "Most of the great problems of biology can, after all, only be solved by careful study of animal life in its native haunts."

In these rambles the writer first takes up the mammals in his neighborhood—the mice, the squirrels, the minks and weasles, and such like creatures. One of them is the opossum, whom he considers does not "play 'possum," but is in reality paralyzed by fear. His argument here is less satisfying than usual. The same phenomenon is observed in various insects, and seems to be a veritable voluntary hypnotism. The migration of birds, the architecture of their nests, their hybernation, and their language, furnish themes for entertaining chapters. The loves of turtles, the affectionate disposition of snakes, the strong parental feeling of fishes, the vocal sounds they produce, their games, and their cannibalistic tendencies—these and many other curious traits of the many beings who pursue their various lives unobserved around us, are related with the fresh flavor of personal observation in the enticing pages of this volume.

It cannot fail to be welcome to every naturalist, and can scarcely fail to turn all its readers into naturalists who are not so already.

Doctrines of the Circulation. A History of Physiological Opinion and Discovery in Regard to the Circulation of the Blood. By J. C. Dalton, M. D., etc. Cloth, 8vo., pp. 296. Philadelphia, H. C. Lea's Son & Co., 1884.

In the progress of physiological study no fact has been of greater moment, none has more completely revolutionized the theories of teachers, than the discovery of the circulation of the blood. This explains the extraordinary interest which it has to all medical historians. The volume before us by the distinguished New York professor, is one of three or four which have been written within the last few years by American physicians. It is in several respects the most complete, and in the appendix gives a number of extracts from original sources which are very satisfactory to the reader.

The author explains what seems so obscure—that so many eminent physicians of the age following Harvey refused to accept the doctrine of the circulation. He intimates that many of our terms, such as "reflex action," "animal ferment," and the like, may appear to posterity quite as meaningless as does the distinction between "vital spirits" and "animal spirits" to us.

The volume, though small in size, is one of the most creditable contributions to America from an American pen to medical history that has appeared.

THE

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D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

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A PECULIAR CASE OF SUFFOCATION.

In a meeting of the Berlin Medical Society of October 15, 1884, Prof. Ewald reported the following case of suffocation, that had been brought to him the day previous for the purpose of post-mortem: In Berlin is an institution for old and destitute women. Many of those who there live the rest of their days, evince peculiar animal instincts; while eating, they often are afraid of each other and swallow their food with such a haste, that it has happened more than once, that a large piece entered the larynx and the life of the individual could only be saved by the rapid extraction of the food. The day previous, Professor Ewald was sent for in haste to attend one of these old women, who had suddenly sunk down unconscious on her chair. Her face was completely cyanotic, the pulse could not be felt, and the patient gasped but a few times when he arrived. E. at once pushed his finger into her throat, but found, to his surprise, not only the entrance to the œsophagus open, but also nothing in the larynx. As cyanosis and unconsciousness still continued, E. performed within a few minutes tracheotomy, and then pushed a female catheter through the opening. He was still more amazed, when he found the passage upward and downward unimpeded. The patient meanwhile died.

The post-mortem showed the following interesting condition: The patient had suffered from a well and evenly-developed goitre of the fibrous gelatinous kind. This tumor was far greater behind than in front, and had exerted backwards such a pressure that the trachea was bent at an angle, thus producing a stenosis of the œsophagus to a degree, that it was difficult to force the finger through the narrowed part. Above this stenosis the œsophagus had formed a kind of cavern, and in this cavern E. found a large piece of meat. From here a small elastic band had pushed itself between the two Santorini's rings, and there placed itself in such a position as nearly completely closed the entrance to the larynx. It was thus impossible, during life, even to guess the real condition of things. Remarkable was only, what E. had, however, also noticed in similar cases at

this institute, that the agony was so extraordinarily short and mild; and he thinks he can attribute the fact to the lowered vital energy of the women, as they all are far advanced in age.

The physician who has to perform all post mortem examinations in Berlin of cases of violent death, Dr. Limau, remarked that it is by no means rare that persons are said to have died of apoplexy, when after death he discovered that food had accidentally entered the larynx and thus caused death by suffocation. In such cases he usually found the food lodged in the larynx, and closing the entrance to the trachea. In one single case Limau discovered a piece of plug-tobacco, which had passed through the larynx and trachea and lodged in the bronchus. With reference to Ewald's remarks, that the easy manner of death was to be ascribed to the old age of the women. Limau related the case of a young and vigorous Englishman, who died in his presence without evincing the least agony. In this case the man suffered from an infiltration of the cellular tissue of the neck, compressing the trachea and producing œdema of the glottis. Limau believes, therefore, that there must be still other factors besides old age, which cause the death to appear so rapidly and without any sign denoting violence.

TREATMENT OF LUPUS.

In the clinic of Dr. Schultz (Krenznach) for skin diseases, patients affected with lupus are treated in the following manner, as we learn from a report published by Dr. Ritter in the *Allg. Med. Centr. Zeit.*, 53, '84:

A ten per cent. watery solution of permanganate of potash is brushed with a camel's hair brush on the diseased skin, until a thin black crust has formed. This procedure is repeated daily or every second day; if the latter, according to the sensitiveness of the patient, either simple cerate or a salve made of one part permanganate of potash to twenty parts of fat, is employed on the free day. Under this very little painful treatment the nodules are gradually softened, so that the whole lupus tissue can finally be wiped off with cotton. This mode of treatment usually reaches the desired result within from eight to ten weeks, but the course may be greatly shortened by scraping off the diseased epidermis with a sharp spoon. The scars, which form under this procedure, are characteristic by their thinness and smoothness. Relapses are rare, and rapidly yield to the same method of treatment, which in lupus erythematodes has been employed with the same uniform success. In cases of universal lupus, besides the local application of permanganate of potash by aid of the brush, the same remedy is also added to the baths, which the patient receives daily or every second day. Here about two and a half drachms of the drug are added to each bath.

The treatment of lupus at this clinic has gained such a reputation that patients suffering from it come a great distance to be cured, and all are astonished at the rapidity of success and the mildness of the method. They usually are patients who were afraid of the knife.

ANTIPYRIN AND ITS EXANTHEM.

The effect of antipyrin, of which febrifuge the MEDICAL AND SURGICAL REPORTER has recently published a number of observations in its favor, has now also been investigated in the clinic of Prof. Kussmaul, in Strassburg. The chief of his clinic, Dr. A. Cahn, has reported the results in the *Berl. Klin. Wochensch.*, 36, 1884.

The remedy was administered in cases of acute febrile diseases, as typhoid fever, croupous and catarrhal pneumonia, erysipelas of the face, and pleuritis. In no case has it failed to reduce the temperature, and when the latter again increased no chill announced the higher temperature. In some cases of pneumonia, where on the fifth or sixth day larger doses of antipyrin had been administered to the patient, the temperature continued for several days subfebrile, though the condition of pulse and respiration proved that the crisis had not yet set in. This observation seems to indicate that antipyrin is not only a symptomatic antifebrile remedy, but has also a direct influence upon the whole morbid process. The peculiar antipyrin-erythema, which had already

been noticed in the clinics of Breslau and Zurich, was also met with in Strassburg, especially in those suffering from typhoid fever. This erythematous eruption made its appearance without any subjective phenomenon, and without in the least influencing the course of the fever; it consisted of round, red, slightly elevated spots, their redness yielding to pressure. The extensor surfaces of the extremities showed more such spots than those of the flexors, and the back more than the chest and the abdomen; head, palmar-surface of hand, and the sole of the foot were exempt. On omitting the antipyrin the eruption became pale and ceased, to reappear on the resumption of the remedy.

A PECULIAR CASE OF INFECTION.

That iodoform does not destroy the poison of the soft chancre, may be inferred from the following case, which Dr. E. Lesser, of Leipsic, reported in the *Viertelsjahrsch. f. Dermat. u. Syph.*, 1, 2, 1884:

In consequence of a cut, a young girl had a small wound on the anterior surface of the right forearm. To try the rapid healing generally induced by iodoform, some of it in powder form was brushed over the wound with a camel's-hair brush, which, as was later discovered, had been used on the previous day on a patient suffering from soft chancre. Two days later the wound of the girl had changed to a deep ulcer of the size of a pea, and its appearace as well as further progress completely harmonized with those of a soft chancre.

L. remarked that he cannot say for certain that iodoform does not destroy the virus of the soft chancre, as he does not know how intimately the iodoform had been mixed with the discharge from the sore. The case teaches us to be careful with those of our instruments, may they be brushes, probangs, scissors, knives, or anything else, which we employ in cases of specific ulcerations. It would be safer if physicians would keep a special set of instruments for cases of syphilis, and it is only remarkable that not oftener an infection is caused in such a manner. Regarding lunar caustic, which, perhaps, of all things used in a physician's office, is the one most likely to be promiscuously employed, it has never yet been determined whether the specific virus, where in contact with the virus, is effectually destroyed or not, though we may presume that it is.

Notes and Comments.

A Remarkable Case of a Juvenile Earth-Eater.

The following case, which Dr. Clement Dukes reports in the *Lancet*, November 8, 1884, possesses considerable interest:

"P. B——, aged five years, residing quite in the country, was brought to the Rugby Hospital on December 18, 1883, by her mother, who carried with her in a bottle a characteristic specimen of the common round worm, ascaris lumbricoides. The mother gave the following history: Two years ago the child did not seem well, and after a day or two she became sick, and threw up a large round worm. The mother then gave her a dose of castor oil, and she passed by the bowel three more. A week after this the mother noticed that the child ate the soil in the garden, or that by the side of the road. To stop this vicious habit the child was kept indoors and scolded and whipped, but without effect; for whenever the mother was engaged in her household duties, the child would immediately run out and eat the dirt. She always said, when reprimanded, that she ate the earth to relieve the gnawing pain in her stomach. So urgent was the demand for this soil-eating that the child would, if she could get earth, eat sand, would pick the mortar out of the walls between the bricks; and she would even store a supply in her pocket to eat at her leisure, when she could not get out to obtain it. She has continued to eat the soil, in spite of continual punishments, until the time of her entrance into the hospital on February 12, 1884, when she ceased, as far as could be ascertained, to eat the soil. The mother states that she would put the earth in her mouth, suck it, and then swallow it. She further states that during the two years of earth-eating she has brought up or passed by the bowel about a hundred large round worms. From the number I have seen myself, and from the respectability of the mother, I fully believe this statement. While in hospital she passed many, but under santonin they failed to come away; and after being without any for a month, and having become fat and strong, I discharged her on April 10, 1884, as I thought cured. But on May 2d, her mother

brought her back, she having passed another worm, but she had not again taken to eating earth. During the child's stay in hospital her perverted taste had apparently been cured. I re-admitted her, when she soon passed a worm, and vomited another; but under two-grain doses of santonin three times a day, which she took for several weeks without physiological effects, she gradually ceased passing any more, and regained her health, strength, and good looks.

Cobbold says round worms are rare in British practice, and usually only one occurs; this is my experience. But he also records that Mr. de Morgan had a patient at the Middlesex Hospital from whom thirty-seven were expelled. After the little patient's return to the hospital, I examined the well water microscopically, but failed to find any eggs of the round worm. On October 4th I again saw the child by accident. She was looking well, and had not been troubled with more worms, nor had she again taken to earth-eating."

The Treatment of Retro-uterine Hæmatocele.

From a foreign exchange we learn that in a paper ublished in a recent number of the *Archiv. für Gynäkologie*, Dr. Paul Zweifel advocates more frequent intererence with these effusions than has hitherto been considered good practice. It seems to us, however, that the facts he adduces do not strongly, if at all, support his contention. He advises incision per vaginam, under antiseptic precautions, followed by frequent washing out of the cavity in which the blood has been contained. He relates four cases of his own in which this practice was followed: three got well, and one died. He quotes from other sources 24 cases treated by incision per vaginam, of which five died. In two of these cases death occurred by sudden collapse following the washing out which Dr. Zweifel recommends. As he thinks the washing out was not done in these cases in a proper manner, our author eliminates these two, and reckons, including his own, four deaths out of 26 cases, or a mortality of 15.3 per cent. In our view, however, the two omitted cases ought by no means to be lost sight of, for the washing out of such cavities is not a thing to be done with perfect confidence in its safety. Our own impression is that most cases do just as well without it. Dr. Zweifel then adduces a collection of 66 cases treated by puncture, with 10 deaths, or 15.1 per cent.; a result much the same as that gained by the practice of incision. Bearing in mind the fatal cases of injection, puncture seems to be the safer practice. Lastly, Dr. Zweifel gives for comparison a collection of 129 published cases treated on the expectant plan, with a mortality of 18.4 per cent. But it must be remembered that published cases available for comparison contain an undue proportion of fatal cases, and of cases in which the hæmatocele discharged into a mucous tract; for it is only in such cases that (independently of treatment) the diagnosis is certain. It is familiar to every gynæcologist that small pelvic tumors, accompanied with the history and having the signs of hæmatocele, are very common, and generally get soon well, the mortality among such cases (of which the diagnosis, although not scientifically certain, is yet as sure as that of the cases calling for operation) being nothing like 18 per cent. We regard Dr. Zweifel's figures, combined with daily experience, as confirming the old rule, not to meddle with hæmatoceles unless urgent symptoms, either of pressure or pyrexia, are present. We agree with him that, if we do anything at all, a free incision is best; but the subsequent washing out adds a new source of danger, and, if free exit for discharge be maintained by a drainage-tube, it is not required. If an India-rubber tube will not keep open, a glass one can be used.

The Treatment of Wounds.

At a recent meeting of the Sheffield (England) Medico-Chirurgical Society, Mr. Garrard read a paper on this subject, in which he said that he thought we owed a debt of gratitude to Sir Joseph Lister, whether we adopted his treatment of wounds or not, for he had been the means of bringing home to every surgeon the importance of personal attention to every detail of dressing as well as absolute cleanliness, thus making it possible for the humblest provincial surgeon to obtain results equal to those of the most eminent, except in such cases as opening large joints and deep cavities, as empyema, psoas and other deep abscesses connected with carious bone. He did not adopt his method in all its details, believing that as good results were obtained by simple means. In amputations and other large wounds, he washed them first with hot iodine water, as recommended by Mr. Bryant, and then dressed with dry absorbent cotton, drainage, when necessary, and gentle elastic pressure, keeping the wound always dry. He considered the absorbent cotton impregnated with salicylic acid was much better than the favorite gauze, which was not sufficiently absorbent to keep the wound dry. Taking the last seventy-nine cases at the Rotherham Hospital, and excluding four who died in a few hours from very severe injuries requiring

double amputation, there were four deaths. One was an old man, who had both legs amputated for severe injury, and died on the fifteenth day; another on the sixth day, after herniotomy, the hernia having been strangulated eight days before admission; the bowel sloughed. Neither of the two other cases died from blood-poisoning. For the arrest of hæmorrhage Mr. Garrard, whilst admitting that the catgut ligature was an excellent method, much preferred torsion, which he always adopted, believing it to be the simplest, the nearest approach to nature's own method, and not liable to be followed by secondary hæmorrhage. He had never seen an artery bleed again after having been once properly twisted, and had never had to reopen a wound on that account.

The Physiological Effects of Tobacco Smoke.

From the *British Medical Journal* we learn that Dr. Zulinsky has recently published, in a Polish medical paper, the result of a large series of experiments on men and animals made for the purpose of ascertaining the physiological action of tobacco smoke on animals. He has found that the smoke is a powerful poison, even in very small quantities. In the case of man, tobacco smoke, when not inhaled too freely, is only deleterious to a limited extent. Zulinsky declares that the poisonous character of the smoke is not entirely due to the nicotine which it contains. Tobacco smoke rendered free from nicotine remains poisonous, though not to so great a degree as before. The second poisonous principle is an alkaloid, colidin. Carbonic oxide, hydrocyanic acid, and other noxious principles, are also contained in tobacco smoke. The bad effects of excessive smoking depend very much both on the kind of tobacco consumed, and on the manner of consuming it. In cigar smoking the greatest amount of poison is inhaled, in cigarettes much less, in pipes still less, whilst those who indulge in the nargileh, or any similar luxury, where the smoke is drawn through water, take tobacco in its least mischievous form. Such are Zulinsky's conclusions. There can be little doubt that many of the light-colored tobaccos have been partially bleached in order to give them that pale tint which moderate smokers believe to be an infallible indication of mildness. The decolorizing agent is suspected to be, in many cases, a deleterious chemical compound. Some of the light tobaccos smoke exceedingly hot, owing to the quantity of of woody fibre which they contain. This is especially the case with "bird's-eye," which is cut near the stalk of the leaf, the slices of the midrib, thick in this part of the leaf, giving this variety of tobacco the characteristic appearance from whence it derives its name. "Bird's-eye" is very apt to cause slight inflammation of the tongue, on account of the irritant character and heat of its smoke; and, together with other light tobaccos, must act very prejudicially in elderly smokers, who may be prone to cancer of the tongue or lip. Dark tobaccos are readily adulterated; but when pure they are probably the most wholesome for pipe-smoking.

Introduction and Extraction of Needles.

M. Després, in a lecture which he delivered at La Charité (*Gazette Médicale*, May 17), made some interesting observations. A young woman striking a table with the palm of her hand thrust a needle into the base of her middle finger, and this, striking against the first phalanx, broke and became fixed there. When seen two days afterwards, the fragment of needle had completely disappeared amidst the inflamed tissues. On pressing at the base of the middle finger, however, a foreign body, pressure on which occasioned pain, could be felt. An incision was made at this point, and a fragment of needle, measuring 1½ centimetre, removed by the forceps. Here the incision was justified by the fact that the foreign body was firmly fixed. The subject of a second case was a young woman into whose breast a needle was driven obliquely by a blow, and entirely disappeared under the skin. Guided by the patient, the presence of the needle could be ascertained; but in this case an incision for its removal would be improper, for the integuments of the breast are so mobile that an incision made in the skin would not correspond to the foreign body. The presence of the needle having been exactly determined, we should seize it in its length and make pressure on its two ends. At one of these we may perceive a slight cracking sound, and here the patient also feels a sharper pain than elsewhere, and this is the point of the needle. If we now press firmly upon the other end, this point will be forced through the integument, and can then be seized with a forceps. An incision should never be made except when the body is fixed in the tissues, as in the first case. One caution must be borne in mind, and that is, we should never attempt an extraction on the mere statement of the patient that a needle is present in the tissues, and when we are unable to verify its presence; for sometimes persons declare that they have needles in their tissues when they have not; or when we are consulted the needle may

have already migrated to another part of the body, this migration sometimes taking place very rapidly.

Pathology of Alcoholic Paralysis.

To the Pathological Society of London (*Medical Press*, October 25, 1884):

Dr. W. B. Hadden showed specimens from two cases. The first was a woman, aged 33, who had been a heavy drinker. She had a loss of memory for three months, and ten days before her death came for loss of power in legs, and œdema. She had retention of urine, and was noisy and delirious. There was no power in her legs, but no tremor, the reflexes were absent, and the muscles of the legs did not respond to the electrical current. The liver was enlarged. At the *post mortem*, generalized tuberculosis was found, and ulceration of the intestine. The medulla and brain were normal, also the spinal cord. The second patient was aged 42; and her father had died of diabetes. She had suffered from delirium tremens; she could not walk alone. There was no loss of power over bladder or rectum. Her limbs were cold, the arms wasted; there was drop-wrist, the extensors being more affected than the flexors; the interossei were affected. The reflexes were absent, the muscular sense was normal, there was no anæsthesia of the trunk. The legs were emaciated, drawn up, and she could not bear to have them touched. At the *post mortem* examination there was some atheroma of the aorta and a little broncho-pneumonia. The liver was cirrhotic, the brain healthy, and the cord, on microscopical examination, was also healthy. The sciatic nerve showed the tubes much reduced in size, and the medullary sheath and axis cylinders reduced also; there was no segmentation of the myelin. There was some thickening around the nerve tubes. The right gastrocnemius showed absorption of the muscular fibres with interstitial fat in considerable amount. Thus in both cases the cord was healthy, confirming the view that the disease was one of the peripheral nerves. In another case he had found atrophy of the hypoglossal nerve. The association of cirrhosis of the liver and general tuberculosis was found to be common in these cases.

Tetanus Treated by Ether Spray.

Dr. Bouteillier has communicated to the *Progrès Médical* a case of traumatic tetanus and another of chorea treated successfully by him, with the application of ether spray in the spinal column. A man whilst driving struck his horse with the end of the reins, and received the *contre-coup* upon the third finger. A small wound, which bled profusely, was the result, and a week afterwards cicatrization was complete. However, his business called him out again, and he had to make a long journey when the weather was very cold. On returning he felt great oppression, and two days afterwards he could with difficulty open his mouth, and in the night of the same day he was seized with constriction in the chest every five minutes. When Dr. Bouteillier arrived, he found the patient motionless in his bed, the jaws tightly shut, and the lateral muscles of the neck contracted, opisthotonos well marked. A purgative was ordered, and pulverizations of ether on the spine every hour for five minutes at a time. The next day the patient was notably better. Calabar bean according to the formula of Watson was also administered. From this time the attacks diminished, and the ether spray was kept up every two hours for a few days longer, when the patient was considered entirely convalescent. The second case was no less striking. A boy, æt. 11, was suffering from well marked chorea, for which he was treated with opium, bromide of potassium, arsenic, and calabar bean, for five weeks without the slightest advantage. It was then that the author thought of the treatment of Lubelski. Ether spray was applied to the spine morning and evening from three to five minutes at a time. The second day the boy was better, and at the end of a fortnight of the treatment all chronic symptoms had ceased, and never returned.

Mullein Leaves in Phthisis.

We have already adverted to the experience of Dr. Quinlan on this subject, and as of interest in this connection, we note what Dr. J. B. Richardson says in the *Brit. Med. Jour.*, November 8, 1884:

"About twelve months ago I first tried this remedy; and, since that time, I have given it to eighteen persons. Fourteen were cases in one or other stage of phthisis, and four were ordinary healthy children, varying from 10 to 14 years of age. Of the cases of phthisis treated with three ounces of the leaves boiled in one pint of milk, to be taken in the morning, some increased in weight, and others did not do so during a fortnight's trial; but when the milk was given alone, the result was the same; or if there were any difference, it was slightly in favor of the milk treatment alone. I think this was due to the want of appetite produced by the mullein leaves. In the four children, during one fortnight on the

mullein treatment, the increase was, on an average, half an ounce a day. On the treatment of milk without the leaves, the result was exactly the same. I then treated them on mullein leaves for one week, and milk only for another. The result was an increase, but not so great as before. The children were poor, and not well fed. I should like to hear the opinion of other members of the profession on this treatment. I have, perhaps erroneously, but as the result of the above experiments, come to the following conclusions:

"1. The taste of the leaves is very disagreeable, and it is difficult to get patients to take the mullein.

"2. Mullein tends to do away with the appetite of patients taking it.

"3. It does not so nourish the body as to cause increase of weight.

"4. In the treatment of phthisis it is useless."

Sulpho-Carbol, the New Antiseptic.

From the *London Med. Times* we learn that M. Pierre Vigier, the able writer of the "Pharmaceutical Contributions" in the *Gazette Hebdomadaire*, giving an account (in the number for Aug. 8) of a paper on a new antiseptic, read at the Société de Biologie, by M. Ferdinand Vigier, a *pharmacien* of Paris, observes that the fact of its author being his near relative is an additional security for his examining the pretensions of the substance to an important position. The substance in question is orthoxyphenil-sulphurous acid, which may be more conveniently named *sulphocarbol*, as more simply indicating a combination of sulphuric acid with carbolic or phenic acid. The antiseptic and antifermentative properties of this compound are remarkable, and it has the advantage over carbolic acid of being soluble in water in all proportions, and of being neither poisonous nor caustic. It is a syrupy, rose-colored liquid, of a pungent odor, but no wise disagreeable in solution. It is volatilized in a water-bath, and may be used for fumigation. It was discovered in 1841 by Laurent, and has since then engaged the attention of many chemists. Recently its properties have been investigated by M. F. Vigier, with the assistance and in the laboratory of M. Laborde, and its great antiseptic powers have been duly demonstrated. It may be given internally also, in syrup and water, in doses of from one to five grammes daily. Indeed, being an inoffensive product, its doses may be increased *ad libitum*, which of course is not the case with carbolic or salicylic acids.

Alcoholic Injections in Uterine Hemorrhage.

Dr. Thomas F. Hopgood, in the *Brit. Med. Jour.*, October 25, 1884, says:

"It is always useful to know any remedy which can be used, upon the spur of the moment, in cases of uterine hemorrhage; and it is useless to talk about injections of cold or hot water, when there is no injection apparatus at hand to use. So also is it with perchloride of iron and subcutaneous injections of ergotine; but if you do not go prepared with these remedies, the patient in most cases would be dead before they could be obtained.

"I have used the strong perchloride once, with perfect success, in a very bad case, taking it with me in a case of *post-partum* hemorrhage; once in a case of this accident, which recurred after twelve hours; and once when the patient died, it arriving too late to save life. Being driven into a corner over a case where most severe hemorrhage took place immediately after the placenta was expelled, the blood running off the bed into the room—one woman who was present fainting and another running away—I caught hold of a bottle of whisky, which was standing near the washstand basin, and pouring half the spirit into the basin, I soaked a napkin and introduced it into the uterus, when I had the satisfaction of feeling the uterus immediately contract; the hemorrhage ceased, and my patient made a good recovery. I have used this treatment several times since, and with the same result.

Death From Methylene.

Our ordinary anæsthetics are sometimes dangerous, and it is well that we should realize this fact. Hence we note the following case, which Dr. W. A. Buchan reports in the *Lancet*, November 15, 1884:

"John B——, aged nineteen, a miner, was injured six months ago by an explosion of gunpowder while he was "tamping" a hole. A number of pieces of stone were blown into his arm, and his right ulnar nerve was divided. On September 19th, he was put under methylene, and several pieces of stone were removed. On that occasion he took the anæsthetic perfectly well. On October 17th he was brought into the theatre for suture of the ulnar nerve, when methylene was given on a leather mask. The patient took the anæsthesia badly from the commencement, struggling violently, and it was with difficulty that anæsthetic was induced. The pulse during the induction was good, but on the commencement

of the operation the patient became rapidly cyanosed, and the heart's motion suddenly ceased, the pulse having given no indication of danger.

"A post-mortem examination was made by order of the coroner, when the right ventricle was found full of blood, and the left ventricle slightly hypertrophied and contracted. The valves of the heart were quite healthy.

"I may mention that a sample of the methylene used was tested, and found to be pure."

Treatment of Marsh Fever by Subcutaneous Injections of Carbolic Acid.

Dr. Dieulafoy communicated to the Société Médicale des Hôpitaux of Paris (Oct. 10), the history of a patient who, since 1877, had had tertian fever three times, which had always been successfully treated by the administration of sulphate of quinine. The fever having returned last June, the patient came under the care of Dr. Dieulafoy, who on the first day injected subcutaneously two centigrammes and a half of carbolic acid dissolved in a hundred parts of water. The quantity was increased on the following days to five centigrammes, and to seven centigrammes on the days of apyrexia. Recovery was complete at the end of seventeen days. The patient had then absorbed eighty-four centigrammes of carbolic acid, without showing any signs of poisoning. In the subsequent discussion, Dr. Laverau reverted to the fact that carbolic acid injections had been employed against marsh fever so far back as 1869, with questionable success. He doubted the propriety of attempting to supplant so certain a remedy as sulphate of quinine. Dr. Huchard related the case of an Arab in whom quotidian attacks of fever, which had resisted all other remedies, yielded to bromide of potassium; and Dr. Labbé alluded to the good effects, too often overlooked, of arsenical medication in malarial poisoning.

Phenic Acid in Intermittent Fever.

Dr. Dieulafoy read an interesting paper before his colleagues of the Société Médicale des Hôpitaux upon the treatment of intermittent fever by phenic acid, and cited a case in point. A patient, æt. 36, fell ill with ague of the tertian type in 1877, for which he was treated successfully with quinine; several times the fever returned, and gave way each time to the same drug. Four months ago another attack came on, and the patient entered the hospital under the care of the author. Subcutaneous injection of half a grain of phenic acid was administered the first day, and a grain the following days. After seventeen days of this treatment the man was cured. He had absorbed in all fifteen grains in that time, without producing any symptoms of intoxication. M. Laverau refused to recognize the advantage of this treatment, adding that it had been already tried in America without result. In this opinion he was supported by another member. M. Huchard said that bromide of potassium was an excellent agent in intermittent fever. He had seen an Arab cured by the salt when every other method failed. M. Léon Labbé thought that phenic acid could render real services in intermittent fever, and he thought arsenic was too much neglected now-a-days.

Fracture of the Penis.

In the *New Orleans Med. and Surg. Jour.*, Dr. H. A. Veazie reports the case of a young man who met with this accident during coition. On examination, it was found that the penis had been broken through and through, except the cutaneous covering. The two fragments could be moved upon each other, and on making traction, a distinct sulcus could be felt at the seat of the break, which was about an inch and a half back of the corona—the urethral spongy body and the corpora cavernosa all evidently broken through. His urine was drawn off, quinine and opium given, and incisions made through the skin to give exit to the extravasated urine. The next day he had high fever and severe rigors. Sloughing occurred in patches, none larger than a half-dollar piece. A disinfectant lotion of liq. sodæ chlorinat. was applied to the penis, and he was instructed to draw his urine with a catheter when necessary. He made a good recovery, all openings healed well, but the distal fragment did not become erect until six months after the accident. The organ finally recovered its former usefulness. This was a case evidently of fracture of the healthy penis, there having been no disease of that organ up to the time of the accident.

Excision of the Cæcum.

From the *Brit. Med. Jour.*, November 8, 1884, we learn that Mr. Walter Whitehead recently excised, at the Manchester Royal Infirmary, the cæcum and the ascending colon of a man suffering from a carcinomatous growth encircling a large extent of the bowel. After the excision, the ileum was attached to the skin below, and the commencement of the transverse colon to the skin above, in the primary incision made through the abdominal wall just outside the rectus. The superior mesenteric vein was wounded during the

removal of an infiltrated mesenteric gland, and had to be ligatured. The operation, which was comducted on Listerian principles, occupied nearly two hours, and was found to be more tedious than difficult. We learn that, four days after the operation, the patient was free from a single untoward symptom, and promised to make a complete recovery, the temperature never once having exceeded normal limits.

Strange Migration of a Needle.

Dr. D. Campbell Black reports the following case in the *Lancet*, November 8, 1884:

About the end of November, 1883, a lady called upon me, stating that the greater portion of an ordinary sewing-needle had broken in the first joint of her left thumb. I remember having felt the needle point, and, after ineffectual attempts at its extraction, having advised my patient to let it alone, lest the attempt to remove it might result in greater injury to the joint. A few days ago the patient called upon me to inform me that a day or two ago previously she felt a pricking sensation in the right forefinger, and, having broken the skin, she without difficulty removed the greater portion of the lost needle from the point of the finger. The point of it was quite clear, the remaining portion rusty. Of all the strange journeyings of needles in the flesh, this is the strangest which has fallen under my observation.

Ricord on the Contagion of Cholera.

M. Ricord, at a recent meeting of the Académie de Médecine, made what he described as a confession of faith. He had witnessed all the epidemics of cholera, the first, in 1832, included. At that moment there were 600 patients in the hospital where he was physician. Not one of these 600, either before the entry or during the residence of the cholera patients, was attacked with cholera. Not one of the nurses, male or female, nor of the medical officers, caught cholera. Dr. Ricord adds that, during this epidemic, he did not see any facts which lead him to believe that cholera is contagious. His conviction remains the same after studying the subsequent epidemics, and he is strongly opposed to quarantines, which are irksome and useless.

Treatment of Gleet.

In the *Lancet*, November 15, 1884, Dr. Hudson describes a method of treating gleet by means of metal bougies anointed with carbolic oil, iodoform and resin ointment, or iodide of sulphur ointment. The bougie was retained *in situ* for from twenty minutes to four hours, and passed at first every four days, and afterwards weekly till a cure was effected. He had used the method in eighty-eight cases, and more than fifty had been cured. He attributed the success to the long-continued application of the drug, and the paralyzing influence of the bougie on the urethral muscle.

CORRESPONDENCE.

Lyell's Displacement of the Radius.

EDS. MED. AND SURG. REPORTER :—

Prof. P. S. Conner reports in *Clinic*, April 20 1872, two cases of this displacement; and not having seen any other case reported, it has led me to suppose that this displacement is considered of very little importance, or does not happen frequently; the latter I am inclined to believe, as in a long practice, extending over a quarter of a century, I have seen but one case, which was brought to my notice a few days ago.

H. McC., twelve years old, blonde, of delicate frame and lax muscle, came to my office, stating that while swinging from a trapeze his hold gave way, and he had not only been thrown upon the ground, but slid some distance upon the external side of the forearm, thereby apparently, as Dr. ——— had told him, straining the elbow-joint, and, indeed, such seemed to be the case. The integuments about the joint were tumefied, along with ecchymosis and general soreness; the arm was unnaturally crooked outward, with a round appearance about the joint, that sent the hand smartly pronated. Unlike other dislocations, the joint was perfectly movable within certain limits; extension and supination were slightly impaired, while rotation was perfect. Upon a careful examination of this joint, it was apparent that the head of the radius had ruptured the attachment of the coronary ligament and rested upon the outer edge of the coronoid process, under the edge of the attachment of the brachialis internus, thereby causing the tumefaction; the biceps flexor cubiti seemed to be contracted, and owing to its attachment into the posterior part of the tubercle of the radius, the hand was pronated to some extent; such, at least, seemed to be the condition in this case.

Reduction was easily accomplished by placing the palm of the right hand upon the palm of patient's left, and bringing the patient's elbow across the left knee with the thumb of the right hand pressing outward upon the head of the radius; extension and pronation accomplished by the left hand, the radius slipped nicely into place, the arm immediately returning to a straight and natural appearance, although some difficulty was had in retaining the bone in place, with stiffness of joint; both were overcome with splint and passive motion.

Thinking that such a case may again be mistaken for a strain, I have taken the liberty to call the attention of the profession to this displacement.

I. NUTT PLUMMER, M. D.

Shoals, Ind., Nov. 16, 1884.

Prepuce Grafting.

EDS. MED. AND SURG. REPORTER:—

I notice on page 568, vol. li., No. 20, of the REPORTER, an article entitled, "Prepuce Grafting," stating that the suggestion is made in the *Lancet*, October 4, 1884, by Dr. R. Clement Lucas, that the skin removed in the operation of circumcision can be advantageously used for the purposes of skin grafting, to fill large granulating surfaces left after burns.

I wish to state, that the same idea was suggested to me by my friend, Dr. F. L. Hirschmann, of Norway, Michigan, in May, 1884, when called in consultation with me to see a case of extensive burn, involving the whole of the lower extremity, from the ankle to within three inches of the scrotum, and taking in the whole circumference of the limb. The grafts were obtained from the skin of the scrotum removed from a healthy individual in the operation for the radical cure of varicocele. The piece of scrotum was enveloped in oiled-silk, and packed in saw-dust and ice, and sent from Chicago, Illinois, to Norway, Michigan, a distance of 325 miles, where the grafts were cut and applied after the lapse of over eighteen hours from the time of operation, with good results.

We also obtained good results from grafts taken from the skin of a man killed in the Vulcan mine. The grafts were taken from strips of skin cut from the arms fifteen hours after death.

B. W. JONES, M. D.

Vulcan, Mich.

NEWS AND MISCELLANY.

Panics in Public Assemblies.

We note the following from the *Lancet*, November 8, 1884:

We have so repeatedly, and at such length, from points of view special as well as general, discussed the subject of panics in public assemblies, that it is difficult to offer any suggestion that can claim notice on the score of newness. There is, however, more than sufficient food for thought in this topic; and, without dwelling on the details of the recent lamentable occurrence at Glasgow, or attempting to determine the exciting cause of the catastrophe, which is, indeed, *sub judice*, it may be worth while to offer a few observations on the matter as a whole. Panics will take place as long as assemblies are held; and without in the least abating anything of the remonstrance we, in common with our contemporaries, have from time to time addressed to local and central authorities against the neglect to *enforce* proper precautions, it must be conceded that, even if the assembly in which a panic occurs consisted of a dense concourse of people in the centre of an open plain, without buildings or rails, or anything whatever to prevent the crowd from dispersing, dire accidents would be sure to befall the innermost of the persons congregated, and deaths would probably ensue either from pressure, suffocation, or trampling. It is therefore useless and misleading to wholly blame the surroundings of a panic-stricken crowd for the commotion which occurs in it, or for the consequences which ensue when silly, or, for the moment, senseless people rush madly on their own destruction. The real fault is in the average mind; and, unfortunately, the very dwelling upon these "accidents," and the word-picture painting of their horrors in the newspapers, inevitable and necessary as publicity must be deemed, are evils inasmuch as they aggravate the susceptibility to panic which, above all things, it is most desirable to reduce and relieve. If only reason could be retained, and weak-minded and excitable folk would not go stark raving mad the instant some fool or knave cries "Fire" in a public assembly, all would be well. No punishment is too great for the wanton scoundrel who raises a needless terror. He is worse than a murderer. Hanging is too good for such a criminal. No words can adequately express the indignation that must be felt against an offender of this class; but the fatuous and contemptible excitability of the majority of sight-seers is scarcely less abhorrent to common sense and humanity. Is life so very precious, is death—the inevitable—so appalling, that the poor mean fool must lose his wits and forget everything but his miserable lien on existence, the moment this right of property seems to be assailed? If half a dozen savage dogs, or a few stalwart men with cart-whips, could be let loose on a panic-stricken assembly, the best possible treatment would be adopted. This is how the shrieking multitude ought to be reduced to order. We begin to think stern reproach should take the place of compassion for the victims of panic. Harm has been done, and is done, by laying too much stress on the need of special precautions. Let crowds be taught to take care of themselves. Let those who go to crowded assemblies of all sorts and conditions clearly understand that they go with their lives in their hands, and at their own sole risk; that they must shift for themselves, and if they behave like idiots they must take the consequences.

This is the line of argument which strikes us as not merely politic, but proper to the case. There is too much trusting to others, and to the provisions for safety which the managers of public assemblies ought to be compelled to make. It is nonsense, idle and worthless ignorance, to talk of the possibility of emptying a building in so many minutes or seconds. All such calculations are rendered useless and inapplicable the instant a panic occurs. A doorway out of which ten men might walk abreast would not suffice for the safety of even one hundred persons if they all rushed to it at once. The *reductio ad absurdum* is made by almost every "accident." The wider the exit the greater the rush, and the greater the rush the greater the accident, without regard to the structure or the way of the exit. If a thousand persons can be quietly got out of any building in two minutes, the whole thousand will be jammed together in trying to get out in half the proper time. It is the madness that causes the calamity, not the limitation of the means of exit, provided always that these are fairly adequate. Something must be done to secure immunity from panics, and still more needs to be done to induce or compel persons to act as sane creatures instead of lunatics in the face of danger. We would urge this subject on the consideration of members of

our profession and the public generally. Lectures on the folly of panic might with advantage be delivered from time to time, and it would be well if a serious attempt were made in every city, town, and populous district to discipline crowds and to inculcate the great lesson of safety, which consists in the experience that cowardly craziness in the presence of real or supposed danger is alike discreditable to men, to women, and even to little children, who might be taught betimes that all *must* die, and that to rush madly away from death is to surrender the claim to live, and to show that the gift of life has been unworthily bestowed and is unmerited.

Notes on the Mortality of Providence, R. I.

From the City Registrar's report, we note that the 205 persons who died in Providence during the month of October included males and females nearly equally divided; also married, single, widows, widowers, and divorced; also natives of eight different nations, and individuals of nine different nationalities. The decedents also included persons of every age, the youngest being a female of foreign parentage, who remained only four hours in this world, and the oldest being a female of American parentage, who reached the mature age of ninety-six years and six months.

Of the whole number, 16 lived less than one month; and 75 or 36.58 per cent. lived less than five years. Of the decedents of American parentage, 33.68 per cent. were under five years, and of those of foreign parentage 39.09 per cent. were under five years. The number of aged decedents was unusually large in October, there being 14 between 70 and 80 years of age, 12 between 80 and 90 years, and 5 between 90 and 100 years. In the first decade of life there were 82 decedents; in the second decade there were only 15.

Though the number of deaths in October was larger than in September, there was a great change in the causes of death. In September there were 72 deaths from diarrhœal diseases; in October there were only 13. In September there were 8 deaths from fevers; in October, 17. In September there were 5 deaths from scarlatina; in October, 11. In September there were 4 deaths from accidents; in October, 12. There were 11 deaths, each, in October, from typhoid fever and scarlatina, both diseases showing considerable increase. It is probable that scarlatina will increase still more before warm weather comes again.

There were 5 deaths reported in October, from the effects of malaria, either "malarial fever" or "typho-malarial fever," and two or three of them had the addition "pernicious chill," or "congestive chill." This is an astonishing mortality from this class of diseases in Providence, and at first sight seems impossible, as "malaria" has generally been considered a very troublesome cause of sickness and suffering, but not often fatal. I find on examination that it is much oftener reported as a cause of death than I had supposed. Thus in Detroit, malaria in some form was reported as the cause of 9 deaths in September; in Chicago, 6 deaths in September; in New Orleans, 20 deaths during the *week* ending October 4; in Brooklyn, 13 during the *week* ending October 18. The *cases* of "malaria" in Providence during the last three months may probably be reckoned by thousands.

There were 59 deaths in October from zymotic diseases, or 28.78 per cent. of all the deaths. The number was 15 less, and the percentage 8.78 less than in September.

There were 13 deaths in public institutions, including those drowned in the river, during the month of October, as follows: Rhode Island Hospital, 6; Butler Hospital, hotel, and police station, one each; Dexter Asylum, 2; drowned in river, 2; total, 13.

Items.

—Mr. Sampson Gamgee, F. R. S. E., has been elected a Corresponding Member of the Medical Society of St. Petersburg.

—Dr. W. M. Fuqua, of Hopkinsville, Ky., has been recently elected to the Chair of Anatomy in the Memphis Hospital Medical College.

—At the recent examinations for the externat in the Paris hospitals there were 347 applicants, among whom were six women and one Turk.

—At the graduating exercises of the Medical Department of Dartmouth College, held on November 11, the degree of M. D. was conferred upon eighteen graduates.

—There were twenty-four deaths from yellow fever at Havana during the month of October, out of a total mortality of 549, and two deaths from yellow fever during the week ending November 8.

—The Baltimore surgeons have been using cocaine extensively in eye and venereal diseases. The reports are very satisfactory. Dr. Michael found it very useful in opening buboes and cauterizing venereal sores.

—In Algeria, from October 4th to the 10th, there were 49 deaths from cholera; during the succeeding week there were 55. The Governor-General of Algeria, with the concurrence of the Sanitary Council, reduces the quarantine imposed on French travellers to 28 hours.

—Dr. Louis Alexander Dugas has recently died at his home in Augusta, Ga., in the seventy-eighth year of his age. Dr. Dugas served several times as President of the Medical Association of Georgia, and from 1851 to 1858 he acted as editor of the *Southern Medical and Surgical Journal.*

—The attendance at the Cincinnati medical colleges this winter is usually small. (So says the *Medical News*, November 22, 1884.) The Medical College of Ohio still takes the lead with a few more than two hundred students, while the Miami has about one hundred and the Cincinnati forty.

—An influential committee has been formed in Stockholm, under Prof. Axel Key's presidency, to carry on the work of collective investigation in Sweden in connection with the International Committee. A similar committee has been formed, at Professor Runeberg's instance, in Finland. The recommendations of the sub-committee as to the lines of inquiry to be pursued are at present under the consideration of the International Committee.

—Dr. Arning, at present in Honolulu (*Virchow's Archiv.*, vol. xcvii.. 1884,) excised portions of the ulnar nerve in two cases of pure anæsthetic leprosy, and found bacilli lepræ in the connective tissue between the nerve-fibres. This is the first time that the presence of bacilli in the pure anæsthetic form has been demonstrated.

—A physician in extensive practice has daily opportunities of judging of the force of the maxim that "truth is stranger than fiction," and we have often wondered that some of these experiences have not found their way into print, disguised as short tales. Some of the stories in Dr. Warren's "Diary of a Late Physician" could be easily matched.

—There was an amusing picture last March, in *Punch*, of one kind of character in our profession, not uncommon. It represents the drawing-room at a winter health-resort, and one lady says to another, "Oh, that's your doctor, is it? What sort of a doctor is he?" "Oh, well, I don't know much about his ability; but he's got a very good bed-side manner!" The man who drew that picture drew it from life.

—Cases of cheese-poisoning are attributable, according to Dr. Vaughan (*Proc. Am. Pub. Health Assoc.*), to a chemical substance soluble in alcohol, the production of which is attributable to the rapid growth of the Bacillus subtilis. As it is present in new cheese, the difference between the poisonous and non-poisonous is one of degree rather than of kind.

—According to the *Gaulois*, a doctor engaged in the laboratory of Professor Vulpian has swallowed some pills made from the vomit of a person who died from cholera. The medical man is still in perfect health, but two guinea-pigs which were inoculated with the same vomit succumbed at once. The experiment was made with a view to proving that the microbes discovered by Dr. Koch are innocuous, and that the vomit of choleraic patients is not infectious.

—The Medical Jurisprudence Society of Philadelphia, at its stated meeting held November 11, considered some questions of present interest connected with a recent criminal case before the courts, in which a prisoner on trial for the murder of his keeper had set up the plea of insanity. Two papers were read—one by Dr. Charles K. Mills on the case of Joseph Taylor, the other by Dr. H. C. Wood on "The Absurdities of the Law as Illustrated in the Taylor Case." An interesting discussion was held, in which the President, George W. Biddle, esq., District Attorney Graham, Drs. Robinson, Packard, and Cohen, and Messrs. Carson and Shapley, participated.

OBITUARY NOTICES.

DR. HARVEY L. BYRD.

A Baltimore dispatch announces the death there on November 29 of Dr. Harvey L. Byrd. He was born at Salem, Sumter district, S. C., August 8, 1820. After receiving a classical education there, and having the degree of A. M. conferred upon him by Emory College, Georgia, he entered the Jefferson Medical College, of this city, and subsequently the University of Pennsylvania, graduating therefrom in 1840 with the degree of M. D. He then began practice in Salem, S. C., and subsequently removed to Georgefown, S. C., to Savannah, and thence to Baltimore. He remained in practice in the latter city until his death. On going to Baltimore, soon after the close of the war, he began a movement for the reopening of the Washington University, which had suspended operations for several years, for the establishment of a Southern medical school. He was successful in this movement, and the school was finally opened, with Dr. Byrd as Dean of the Faculty. After five or six years he withdrew from this school in order to join several other physicians in the establishment of the College of Physicians and Surgeons in Baltimore. He held a number of professorships in this college, besides being the first President of its Faculty. He wrote a number of valuable papers on medical subjects. He was a member of the medical associations of Georgia and South Carolina, and a corresponding member of the Gynæcological Society of Boston. He edited the Oglethorpe *Medical and Surgical Journal* for three years. During the civil war he served as a surgeon in the Confederate army. On October 31, 1844, he was married to Miss Adelaide Dozier, who died December 24, 1874, leaving two children.

MARRIAGES.

BLOOM—GETTY.—October 1, 1884, at Getty's Farm, near Norristown, Pa., by Rev. William H. Burr, Dr. Homer C. Bloom, of Martinsburgh, Pa., and MaryJ., daughter of Daniel C. Getty, esq.

GLASER—HERZ.—November 23, 1884, by Rev. D. Cahn, Dr. Joseph Glaser and Miss Virginia Herz, both of New York city.

HUGHES—BURTON.—November 19, 1884, at St. Mary's church, West Philadelphia, by Rev. Gideon J. Burton, assisted by Rev. Dr. Yarnall, Dr. Donnell Hughes and Sarah Summers Burton, daughter of the officiating clergyman.

KILBRETH—MURPHY.—November 6, 1884, in Cincinnati, Ohio, at the Second Presbyterian church, by Rev. Jas. Eells, D. D., John C. Kilbreth, of New York, and Miss Nora M., daughter of Dr. John A. Murphy.

LANGSTAFF — MEREDITH. — November 19, 1884, at Christ church, New Brunswick, New Jersey, by Rev. E. B. Joyce, J. Elliot Langstaff, M. D., of Canada, and S. Josephine Meredith, daughter of the late Bridgewater Meredith.

NICHOLSON—WISE.—November 25, 1884, at Epiphany church, Washington, D. C., by Rev. Mr. Leonard, Dr. Wm. Nicholson and Henrietta Wise, daughter of the late Capt. Henry A. Wise, U. S. N. San Francisco papers please copy.

REINOEHL—DILLON.—November 27, 1884, at the residence of the bride's parents, No. 547 North Twelfth street, by Rev. H. L. Duhring, rector of All Saints' church, Mr. John K. Reinoehl, M. D., of Lebanon, Pa., and Miss Emma M. Dillon, of this city,

DEATH.

ADAMS.—November 21, 1884, at North Canton, Conn., Dr. A. R. Adams, of New York city, aged 36.

AUBERY.—In Cincinnati, Ohio, Dr. William C. Aubery, in his 27th year.

BEMISS.—November 17, 1884, in New Orleans, Dr. Samuel M. Bemiss, a native of Bloomfield, Ky., aged 63 years.

NORTON.—November 10, 1884, suddenly, of heart disease in Baltimore, Md., Dr. T. C. Norton, husband of Hallie M Farquhar, daughter of the late Rev. John Farquhar.

RUDDACH.—October 16, 1884, in this city, William H. Ruddach, M. D., in his 57th year.

SHERMAN.—November 22, 1884, at 52 West 9th street New York city, Dr. Austin Sherman, in his 82d year.